



Digitized by the Internet Archive
in 2016

JOURNAL

OF THE

ASIATIC SOCIETY.

FEBRUARY, 1849.

*General Observations on the contending claims to antiquity of
Brahmans and Buddhists, by Lieut.-Col. Low.*

It is only very lately that I had an opportunity of seeing the CLXVII. No of the Journal of the Asiatic Society of Calcutta of 1845; and of perusing the luminous and able critique it contains of M. Burnouf's work on Buddhism, by Dr. E. Roer.

But although the writer, seems to have convinced himself that the question respecting the disputed antiquity of the Brahmanic and Buddhist systems of religion, has been fairly set at rest, he can scarcely hope that every body will be quite prepared to follow his example. I will confess that some of the arguments adduced were to a certain extent in accordance with my own views, while others claimed the reader's close and unbiased attention, yet it appeared, and does still appear to me, that many preliminary conditions require to be fulfilled, and many points, however plausible, to be established by solid proof, before we can be called upon to give our final assent to the conclusions he has arrived at.

If I might be allowed to propose a theory which should serve to cool down the fervor of dialectics, and give time for a patient and scrupulous search after such facts as can at this day be only obtained from ancient Indian MSS. and from architectural remains, and their accompanying numismatic, religious and civil, records and inscriptions, it would be in some such terms as these:—

The brahmans are confessedly a foreign tribe in India, who were located at first in or about the Punjab.

They must, when they arrived, have been a small body—for they did not spread as a people beyond their original locality until centuries had elapsed.*

From internal evidence they must have brought along with them (from Persia or the N. W. perhaps) a well defined system of social polity, and we must suppose a religion.†

If they had a religion, and had reached a clear stage of moral civilization, they must have had a written language: but it is not under this supposition easy to account for their not having preserved any satisfactory written account of themselves, either as an offset from their parent stock—or as a colony in a foreign land.

That the want of such records, and of dates, would, under the same supposition, lead to the inference that these brahmans wished to conceal their origin, and to thus give them an opportunity of throwing it back into the impenetrable darkness of the past. Thus for instance, although while first peopling or living in the Punjab, they must have been in constant contact with the Asiatic Greek kingdom, yet they have not preserved any thing I believe regarding them worthy of much notice, unless accidentally.

They appear also not to have left, in their original seat in the Punjab, any marks, architectural or otherwise, by which their residence there could or can be traced, unless there were, even then amongst them, schismatics, professing Hero worship, or that of Buddha, who might have co-operated in the building of the Chaityas there, all of which lead

* As. Res. Vol. X. p. 32. The Peish-cára brahmans were Christians and first arrived in Ceylon (from Persia in A. D. 77.) There were Peish-cára kings in Indian, called the dynasties of Arygo, Saca and Salava, and there were 25 kings of the Sacas.

† Wilford says, that Brahma's heaven lies towards Tartary, and that the *Levites* were brahmans.¹ Faber considers that Brahma was the Bromius of the Greeks, the Broum of the old Irish—and when the brahmans desired to represent him in conjunction with his three sons Brahma, Vishnu and Siva they depicted him with four heads, but when the triple offspring of the patriarch (Noah) had to be figured, he had three heads only. These were Jupiter, Neptune and Pluto,—or the Phœnician Cromus the younger, Jupiter, Belus and Apollo—or Shem, Ham and Japhet.²

1 J. A. S. B. Vol. VIII. p. 359, 360. 2 Faber's Cabiri, Vol. II. p. 381.

to the inference that while in that locality their religion was that of the Vedas, solar and theistical, *or agni-istic*.

At the time of Alexander's invasion, brahmans, according to our acceptation of the term, do not appear on the stage—at least not as religionists—so that it is to be concluded that if they had a well defined religion, it was not an obtrusive one—while it seems to be yet doubtful if brahman was not a name subsequently given to the whole tribe, from the title of Brahmana, or pure, having been applied to the ascetics, whose haunts they perhaps chiefly contributed to fill.

The brahmans first start into public notice as intelligent, if not scientific and ambitious laymen, making themselves necessary to kings, and finally imposing on them their spiritual yoke. They had already begun to penetrate beyond their original and circumscribed bounds, when Buddha appeared, but all of India, which was in their front and flanks, must then have been unbrahmanized, and they had not reached Bengal until about B. C. 300—for Mr. Colebrooke informs us that the brahmans of Bengal are descended from *five* priests (only) who were invited (as astrologers perhaps,) from Canyacubja, by Adisura, king of Gaura. There were then too some Saeswatta brahmans and a few Vaidicas in Bengal.*

There is, I apprehend, no proof that the brahmans had temples in India previous to the building of Buddhist Chaityas, and Viharos, or until Buddhism was on the decline.

There is no proof I believe that any brahmanical epigraphic or other inscriptions exist of a date prior to the earliest Buddhist ones of a similar description.

The sudden appearance of some of the earlier gods of the brahmans, when the latter began to see in the near vista a golden ladder reaching to the throne, shews that these gods had probably held a place in their creed for a long while before, if we are not to impute the monstrous birth to an impure, but a ready, fertile, and vivid imagination acting in concert with, and impelled by the new circumstances of their position.

There is no proof what the actual written character and language of the brahmans was at the period of *their arrival* in India. If these were Sanscrit we should be able to trace them to some more occidental region.

If both, which is probable, were rude and unpolished, it would be

* As. Res. Vol. V. p. 66.

equally, if not more, reasonable, to assign to the cognate languages the Pali and Prakrit, a distinct origin, from however a cognate source, provided the direct derivation of these last from the Sanscrit cannot be proved. The Slavonic, the Latin, the Celtic—Thracian, German and Medo-Persian are all more or less allied to Sanscrit.* Jaubert declares that the language used in the Mysteries was not that of Greece, but of Egypt and Assyria, and Homer's dialect of the Gods, or the Arkite Ogdoad, was Chaldee or Hebrew. The tongues too of Chaldea, Syria, Palestine, Phenecia and Arabia, are kindred, and the radical language was widely diffused to *the north and east*.†

During this process of diffusion we may readily believe that it underwent some modifications, especially before ; and perhaps by different lines, it reached India.

Lieut.-Col. Sykes goes so far as to say that proof is wanting to shew that the Sanscrit, in its present form, existed until six or seven centuries after the Pali.

The brahmans, or those amongst them who were religiously inclined, finding perhaps on their reaching India, and for centuries afterwards, a race of settlers who were descendants of emigrants from the same western regions as themselves, and thus allied to them in a great degree in habits and feelings, readily coalesced with them ; and formed the Brahmana or Ascetic school of holy men, each acting for himself, yet associating to a certain extent in selected places, leaving the gods, which then may have been recognized, to be venerated or worshipped by the multitude ; until the latter, running into the first extravagances of polytheism, called for regenerators and reformers, beginning with the first Buddha, unless the process had begun before the ascetic amalgamation had taken place, and could then be reduced to a reasonable period.‡

* M. Suffarik. Foreign Quarterly Review, Oct. 1840.

† Faber quoting Diodorus, Vol. I.

‡ Wilford observes, " that long before Christ, a renovation of the universe was expected all over the world with a Saviour, a King of peace and justice,¹ and the Magi of Scripture carried this idea with them from the East.

" The new Asæ or *Godlike* men from the east, took to themselves the names of the *ancient ones* and gave themselves to be the real Asæ or Gods."² Odin was one of these. The Emperor Augustus was consecrated a God after his death, and both before and after it temples were erected in his honor and sacrifices offered to him.

1 As. Res. Vol. X. p. 27.

2 Ditto quoting Gylfe.

The Sannyasis of India at this day, have eighteen modes of devotional discipline.*

The author of the version of the Milinda Raja informs us in that work that he has only given an abstract account of the austerities and observances of the secluded devotees, who aspire to supreme felicity, in the wild recesses of hills and forests, away from all intercourse with their species, and that the work itself is merely a compendium.

The 28 rules and observances, &c. &c.

- 1 Attanang rakk'hati.
- 2 Ayungwadhati.
- 3 Phalang théti.
- 4 Wachang hitha hati.
- 5 Ayasang winó theti.
- 6 Yasamu panítí.
- 7 Arátíng nasa yati.
- 8 Rátíng uppa theti.
- 9 Waya apaneti.
- 10 Wesa rachang kasutí.
- 11 Kosachha mupanétí.
- 12 Weripang Chauetí.
- 13 Watu panetí.
- 14 Dosu panetí.
- 15 Mohang.
- 16 Manang hanetí.
- 17 Suwitakang b'hachétí.
- 18 Chité Kakkhalang karoti.
- 19 Chittang Sanné hayati.
- 20 Hasang jhana yati.
- 21 Pítíng upphaj hetí.
- 22 Gharukang karoti.
- 23 Labhang napphattayati.
- 24 Mana piyang karotí.

One of these Temples was near Bombay. We find in the late Mr. Turnour's translation of the Mahawanso the counterpart of Virgil's and other ancient writers' accounts of the anticipated renovation of the world where the golden age was to recommence then the Argonauts were to appear followed by the Argo and so on.

* As. Res. B. Vol. V. p. 38.

25 K'hantíng palíti.

26 Sangh-karanan sab'hawang angséti.

27 B'hawa patí sant'hang nkghatéti.

28 Sapp'hang samanyang theti.

In the Ratana Kalapa I find that under the head *Kasina*, these or similar recluses must sit before a small circle of earth until a new revelation of the universe bursts upon them. They must contemplate water, and fire, and air ;—also the colours, blue, yellow, red, white, the ether, or empyrean, Akasha, the sky, and light,—all of which are explained in the Pali work Wis'uddha Maggá.

It may safely be said, that however humanizing in its effects Buddhism may have been, (and it indisputably has always been so in every Eastern country where it has been established), it is of too self-denying a nature, and bears too heavily on the resources of a people to last long in a state of full vigor and purity, and in these degenerate days, revivals, reformations, convocations, and new infusions of zeal are rare or nearly obsolete.

These reformers were only revivers of the older doctrines of the Buddhas ; but the corruptions had so long prevailed that they could not be easily or completely abated even for a while, and the holy men, or brahmana, coalescing with the brahmanical tribe, their influence, although operating independently of each other, may have caused the Buddhas to have been deemed heretics by them, although, if we are to credit Fa Hain, the term would better apply to the brahmins. These last certainly were heretics from the religion they brought with them to India, if the Vedas are its expositors, and if the Buddhists professed that original faith as emigrants from Persia, so the brahmins were equally dissenters from it, and greater heretics than the Buddhists.

It is not necessary then while trying to elucidate ancient Buddhist history, to assail that of the brahmins, or to detract from *their* soaring pretensions to civil and religious antiquity. There is room for both to revel amidst the tortuous mazes of their impalpable chronologies.

It is assuredly however impossible to overlook the fact that the last Buddha was of a Brahman family, and that his father, a king, supported, according to the Mahawanso, 60,000 Brahman priests. We have no means of knowing the actual pedigree or parentage of the previous Buddhas. If what I have (following Sir W. Jones) hinted at, be true,

that the ancestors of all of the civilized people who inhabited India at Buddha's advent, were in fact all emigrants from Persia, or from some country allied to it in religion, then we might easily infer that if the Buddhists really separated themselves from the brahmans, the schism must have begun about the time when they had but just arrived, if not before it, in the Punjab, that the Buddhists preserved the gods and genii which they had mutually worshipped in Persia, while the brahmans, although retaining also these deities, were on the other hand diverging into polytheism—and that these Buddhists engrafted hero or man worship on their own original faith, having either become acquainted with it before their emigration or obtained it from more early emigrants then settled in India—or perhaps from subsequent emigrants from Asia west of India.

Again, how are we to account for the peculiar style of architecture of the Buddhists, and their various emblems.

The former could not, one might suppose, have been based on types handed down by the brahmans, nor have all at once sprung into existence. The Dagobahs too, or Chaityas of the third Buddha Kassapo, belonged therefore to a former age—and their shape was transmitted to the followers of Sakya Buddha.

That the idea of a tomb, gradually expanded into a magnificent Chaitya or relic fane, *might* have been the natural result of man-worship established for centuries, may be readily admitted. But if the original man or hero worshippers, came from the west, then we can be in no difficulty for precedents.

This course is apparently much more reasonable than that which traces the architectural types from the east to the west.

If indeed the Buddhism of India was to be deemed the parent, as it has been by many, of western Buddhism, then it must truly have been of a much greater antiquity than has been claimed for it by its modern advocates, at least it would in such case reach beyond the historical period.

If India, as some writers have supposed, gave a religion—Hinduism in its present acceptation, it could not have been—to the western nations, or to one or more of them, then it would be difficult for us to accord with their etymological inductions, since the radicals in such a case would necessarily have appertained to an Indian language, not to Sanscrit or its derivatives, which came with the Indian races and brahmans,

and apparently at a later period into India. Western Buddhism would rather seem to have had its origin in the Persian empire, or in some other region of western Asia.

The learned Wilford, in his 6th Essay, apparently deems Meru a temple to God, but says, the Buddhists consider it as the tomb of the son of the spirit of heaven, and that their pyramids, in which the sacred relics are deposited, *be their shape what it will*, are imitations of the worldly temple of the Supreme Being, and which is really the tomb of the first of his embodied forms or of his son—and also that the real place where the Thakur's bones are deposited should be unknown, to prevent profanation, as in the case of Osiris's tombs. Therefore it is said that the Thakur's bones are not placed in the pyramid, but in a small vault deep under ground at some distance from it, as at Sárnátha near Benares.* His secret vault is called *Cúti*.*

This practice seems to have belonged to the followers of the former Buddhas, for we find from the Mahawanso, from the accounts given in the above translated book, Phra Thom and from all disclosed I believe of the topes or Chaityas, which have been opened, that the relics were deposited openly in presence of multitudes of spectators, in a vault either in the centre of the lower portion of the spiral structure, some feet above the ground, or else in one under, or in, the middle of the foundation.

Wilford observes that “although the brahmans are not addicted to the worship of dead men's bones, still he knows one instance to the contrary. At Jagannatha, they have a bone of Krishna, which is considered a most precious and venerable relic. It is not allowed to be seen, and neither Hindus nor Bauddhas are fond of making it the subject of conversation.” It is most probable that the temple built at “the *Diamond Sands*,” stood on the site of Jagannatha, and that the heretical brahman Buddhists would, along with the mass of the people, have perpetuated the ancient veneration for the relics, but under a new name. Balas is one of the titles of Buddha but now little known. This word, properly pronounced, sounds exactly like Belos in Greek and Belus in Latin. May we not then reasonably suppose that the temple and tomb of Belus at Babylon was a monument precisely like one of Buddha, and calculated for the very same purpose?†

* As. Res. Vol. X. p. 129, et seq.

† As. Res. Vol. X. p. 134.

The pyramids, like all the temples of Belus in India, had no opening whatever.* I think later excavations have proved that there were entrances to the pyramids of Egypt which had been shut up. The finding of Sarcophagi under the pyramids seems to have settled the question as to their origin. The Musalmans, observes Wilfold, aver that the world is now under the 4th Buddha; Zoroaster or Zarades or Zoroades or Zarat, was the eldest Zoroaster, son of Oromazes, who was according to Lindas, "The Spirit of Heaven," and who directed his bones to be carefully preserved. He is supposed to have assisted at the tower of Babel. The antiquity of relic worship can hardly be disputed.

There were four Adams, and four Buddhas. Adam's body was entombed at his own request in a cave or vault called Alconuz, in a mountain in the centre of the world (of course the Hindu Meru), and represented by artificial hills. Adam's remains after the flood were *divided amongst his posterity*.

Let us now turn again to Faber, in his highly interesting account of the Cabiri, a great deal of which however rests perhaps on probabilities and controvertible etymologies. He says that the Mithratic *cavern* of the Cabiri, was not *always subterraneous*, but sometimes lay concealed in the *centre of enormous buildings of the pyramidal form*. Such was the Tower of Babel, which was yet standing in the days of Herodotus,† who describes it as consisting of eight towers gradually tapering to the top, with a temple at the top, and a *shrine* at the *bottom*, with a statue of Jupiter Belus, or the solar Noah. The pyramidal form was probably adopted in honor of the sun, and in imitation of the tapering flame, as indeed the very name of pyramidal seems to imply this.†

Now if the temple on the top be reckoned as the eighth story, we shall have an exact counterpart of a Buddhist Chaitya without the surmounting umbrella. The temple of Jupiter Belus, stood exactly where one of Buddha now does, in modern Chaityas in Ava and Siam. As to the above definition of pyramid, the lexicons explain the word pyramis without any such allusion to flame or fire, merely describing it as globular or cylindrical or quadrilateral at bottom, but tapering upwards, or a geometrical solid figure, whose base is a polygon, and the sides plain triangles, whose several points meet in one.

* As. Res. Vol. X. p. 134.

† Faber's Cabiri, Vol. II. p. 384, citing Herodotus, lib. I. c. 181-3.

But if the root of *pyramis*, be as it seems to me, *pyra*, we should come at once to a simple exposition of the original intent of a pyramid, according to the Latins; for *pyra* implies, and is, a *heap of wood made for the BURNING of a DEAD BODY*, a funeral pyre or pile. This at least shews that the belief of the Latins was that Babel was a mausoleum as well as the pyramids.

The tower of Babel seems to me to have been raised in honor of some great legislator, or some social or spiritual benefactor. The people of the various countries in its vicinity would, as in the cases of building Buddhist temples in after times in India, Ceylon, &c. have flocked to the spot to assist in its erection, and there would then of course have been a conflict of languages, which might have impeded the work. But it went on apparently to completion, and then the strangers dispersed. Faber says, the tower had *seven* stories, which is the number in a Buddhist Chatya.

It is very improbable that if the idea of raising Dagobas was indigenous, and normal, amongst Indian Buddhists, the latter should have hit exactly on the number seven.

If the Pali character slowly advances from a remote date until it insensibly blends itself with, or almost loses itself in the Sanserit, then, if it did not belong to the Palis or Buddhists, or to some other ancient tribe of people, not brahmans, the latter should be able to shew their own records of the olden time, couched in that character. It would be predicating I should think a great deal, and more than facts yet warrant, were we to assume that during the many centuries throughout which this character was seemingly being wholly appropriated by people not brahmans, these last were holding that people in civil subjection. Nor is there any glimpse to direct us to the point whence the supposed heretics, the Buddhists, took the lead of the brahmans—for this must have been long before Sakya Muni's time, if we are to believe that Chaityas—which kind of monuments were never, as far as we know, tolerated by brahmans—existed long before his ministry,

But the brahmans I believe have no monumental records of Hinduism to shew of a date anterior to those of the Buddhists and couched in the Pali character. It is said they were not historians, nor given to transmitting to posterity on stone or metal any records of themselves or of other people. The truth would seem to be that, having failed to

make, or at least to preserve, any clear account of their own advent in India, they could not, while confined to the Punjab, have had much either of a political or religious nature—which their pride would have allowed them to register.

But let us turn to their debouchment on the plains of India, and we shall see that when they had at last set their feet on the necks of the Buddhists, what marvellous aptitude they displayed for the crafts of the builder, the sculptor, and the engraver.

And here again we may pause to enquire or conjecture, whence such acquisitions were derived. We want much indeed two series of drawings for comparison. One of the architectural and inscriptive monuments of the Buddhists, and another of those of the Brahmans and Hindus—arranged chronologically. That the Greeks of the Punjab taught the former the art of sculpture is highly probable, and will account for the best specimens their temples afford. This will be more probable, if, as I suspect, the best specimens of Brahmanical and Hindu sculpture were posterior to Greek domination in Bactria, and to Greek influence in the countries around it.

It may be allowed and we may reasonably believe, that India was densely peopled when the brahmans arrived on its frontier.

If this had not been the case, that tribe would not have entangled itself in the Punjab, but would have sought out pleasanter quarters on the banks of the Ganges or some part of central or southern India. That they did not do so, is proof that they feared the people then possessing India. It is not very probable then that the minority in this early stage of their progress should be able to impose their own customs, laws, and religion upon the majority. For such a consummation it would be requisite first to shew, if indeed that even would be sufficient, that the then occupants of India were a savage, unlettered, and unreli-gionized race or races, ready to view the strangers as demigods, and to bend their necks to their civil and spiritual domination—and to yield up their native freedom to the unmitigated thralldom of caste.

The brahmans found caste, I suspect, a social arrangement of long endurance, and only altered it to the extent of placing themselves on the highest bench. For as caste was a social system of the Persians, we must suppose the Indians, if they did come from that country, to have brought it with them.

The Buddhists recorded every notable event on stone or on metal, particularly such as had reference to religion and its royal supporters, a feature which distinguished them from the brahmans for many centuries,—and has it yet been shewn that there are Hindu or Brahmanical temples older than the sthupas or chaityas?

Can it be proved what existing language of India, written and spoken, cognate to the Sanscrit, has been directly derived from it, without reference to the Pali?

Ancient Indians.

There would be no difficulty in assigning an origin to the race or races which peopled India previous to the arrival of the brahmans, could we implicitly rely on the conclusions or suppositions of Sir W. Jones, that it was the same with the original inhabitants of Persia. His proofs and reasoning would seem to lead us in many instances to the desired haven of truth, but the former are imperfect, as he himself admitted, and I suspect not strong enough to create a thorough conviction of their cogency.

However, as I have already hinted, there is no cause why we should not suppose with every degree of probability, that the brahmans were not the first civilized people who came as emigrants from the west; and if Persia did not receive her civilization from India, as Sir W. Jones hints they did, the Indians may have obtained at various, and perhaps distantly, separated periods, their civil organization, especially that of caste, and their religion or religions from Persia. We have not certainly any thing very positive to shew that man-worship came from that country, but there were many, and apparently well beaten tracks, leading from the various nations of central and northern Asia to Hindusthan, by which that peculiar worship may have been imported.

Besides, if we refer to the above author's writings,* we shall find that Mahabad, who was the first (at least reputed) king of Iran, and of the whole earth, received a sacred book in a heavenly language from the Creator, and "that *Fourteen* Mahabads had appeared or would appear in *human shapes* for the government of this world." "These are the 14 Menus," &c.

The manner in which these Mahabads are recorded, indicates them to have been rather spiritual superiors than mere kings, metempsycho-

* As. Res. Vol. V.

logical personages perhaps, or Buddhas or heroes. The Buddhists therefore may have easily derived their list of regenerators or Buddhas from Persian history, or tradition carried by them to India, whether we are to look upon them as forming a portion of the emigration to the Panjab or as belonging to previous or subsequent migrations to India. Indeed, this author assumes it as a fact that the brahmans came from Iran, and that the ancient Indians and Persians were Hindus, or in other terms, Cusians, or Casdeans or Scythians, who had established a powerful dynasty in Persia, and whose history had been engrafted on that of the Hindus of Uyodhya and Indraprestha. But this latter supposition only embraces one or more partial emigrations from the west. The whole of India and its shores south of the Gangetic Provinces are not here accounted for, and the variety of tribes which now people that area, exhibit a considerable difference in their physical developments, *hence* a wide field is opened I suspect for research. That the emigrations to upper or N. Western India were by land, can hardly be doubted, and their progress may have been *gradual*, for architectural remains in the regions intermediate betwixt central Asia and India are supposed, and with, I think, much probability, to exist, if found, to attest these last suppositions. But it appears I think equally probable that emigrations to the coasts, and their inclosed areas of India, took place by sea.

If emigrations had taken place from Persia or any other focus in central Asia, to India, anterior to the arrival of the brahmans, they too must have brought with them the religions prevalent at the respective periods in the parent state. But have we any architectural remains, *unconnected* with Brahmanism or Buddhism, which can lead us to conclude what these religions if any, were,—assuming here for the sake of elucidation, that Buddhism was indeed posterior to Brahmanism. It is to be conjectured, not—unless the Pali comes to our aid.

It is difficult to resist the conclusion, after a perusal of Sir W. Jones' arguments, that "the brahmans came directly from Persia." If this position could be distinctly proved, the period might, with tolerable precision, be fixed, when they did arrive; by a comparison of their religious dogmas, as they exist in the Vedas, and in the religion which prevailed in Persia when Zeratusht, as Sir W. Jones informs us, had added to the Sabism and fire worship of Kyumers, which were perfected by Hushang,—the new family of Genii or Angels, and also new

ceremonies for the adoration of fire, while at the same time they might be supposed to have still retained a belief in the theism which originally prevailed in Persia.

This would perhaps throw back the date of their emigration to a period preceding Zeratush, for this reformer had gone to India to gain instruction from these very brahmins in theology and ethics; thus perhaps evincing his knowledge or belief of their having carried these sciences from Persia. This date might be fixed somewhere betwixt B. C. 800 and the advent of Zeratush.

Sir W. Jones does not in the essay I have been alluding to notice the Pali character or language. But if the Sanscrit, as he states, can be traced, and, in a great measure, identified with the oldest languages in Persia, then both the character and idiom of the Pali may perhaps be followed up to the same source through a separate channel.

Much philological acumen will be required to fix the precise relations in which the Deri or refined Parsi,—the Pahlavi and Chaldaic, Assyriac, Zend and its Avesta,—the Pracrit, Sanscrit, and Pali stand towards each other. But until this shall be accomplished no sound reasonings or deductions can be made regarding their precise ages, nor that of the races who employed them.

I am not aware that the foregoing writer's position, that the Parsi and the various other Indian dialects were derived from the language of the brahmins, has as yet had the confirmation of the learned in Europe; although it be still one which has the support of some orientalisists.*

If etymology could be tolerated in a subject like the present, the words Pali and Bali might be supposed to have sprung from D. Herbelot's Pahlavi and Pahalevi—or from the words Pahali and Bahali, which he says the Persians used indifferently.

If the character which has been so felicitously and ably traced back by Prinsep and Dr. Mill to a remote period through all of its proteous forms, be the Pali, let us then be told how and when it branched off from the Sanscrit, and why it was kept distinct.

As the transitions of the Pali went on, each successive one may have left that one which preceded it to be employed for recondite purposes. But if latterly the Maghadi was not the priestly or exoteric language,

* As. Res. Vol. II. from p. 49 to 61.

where shall we look for it, at least before Sanscrit became the language of the Buddhists? If the Pali and Sanscrit characters be originally the same, then the antiquity of the brahmans in Hindustan would either be thrown back to a remoter period than orientalists might be disposed to admit, or the brahmans would be considered as a colony which had imported with them to that country a form of the same character used by the earlier occupiers of it, and which from having arrived at a more advanced stage of improvement than the Pali, gradually superseded it, while the Sanscrit *language* took the place of the Magadhi for a similar reason.

The primeval worship of Hindustan may have been that of demons, spirits and genii, being that natural religion, which in every age and under every stage, from savage life up to the dawn of civilization, has been the result of fear, and of the instructive impulse towards the preservation of life.

It is very probable that the mental obscurity was first brightened by emigrations from the west, at periods long antecedent to the arrival of the brahmans, and that the latter may have pursued the same track. It is hardly possible that any emigrants from the west, however differing in the periods of their arrival, should not have had something common in their civil organization, religious dogmas, and metaphysical subtleties.

Thus it appears to me easy to account for the Buddhists having in their system of religion the earlier gods of the brahmans, Brahma, Ishwara, Indra, with a similar train of Devatas deities probably venerated under other names in Arabia and Central Asia. I allude to Sakya Buddhists, for of previous Indian Buddhism we may be said to be almost totally ignorant, unless we can prove that some of the volumes of Buddhist theology which now exist were extant before Buddha Sakya's advent.

The corruptions of polytheism seem to have begun amongst the Indians long before Sakya's time; and to have modified Buddhism. This last took shortly after his death a more corrupted form; not that of simple hero-worship, which it probably was at first, but as that of a man converted into a demigod.

We have only to turn towards the west to be convinced how prone all the nations of antiquity were to man-worship in the first instance, and to that of his apotheositical form in the second. But there may

be a prebias in the human mind to deify, as there certainly is a predisposition in the minds of the *mass* to venerate, great benefactors to the race, and therefore these separate feelings may operate independently in any country, although the objects of them are more likely to be borrowed by infant nations from those further advanced than themselves, than to have been indigenous.

I do not know why it would be necessary to go to such a distance for the ancestry of the natives of India as the learned Bryant does, nor do I know the positive grounds, if any, on which he founds his assertions that the Hindus, alias blacks, came to India from Shinar, and that they are believed to have been originally Scythians or Cuthites, the posterity of Ilam, from Chus, his son ; and that they settled on the Indus, and *subsequently migrated to* Ethiopia above the Cataracts. I apprehend however that by Hindus the brahmans alone are meant, and the inattention to the proper distinction betwixt the terms Hindu and brahman, is apt to create misconceptions. Brahman could hardly have been the original name of the tribe, but one imposed on them by the Indians when they arrived, being worshippers of Brahma.

But the better informed Wilford on such points tells us that there were two tribes of this people, the Canyacubja or Canoje brahmans, and those from Sacadwip, called Saca or Sacalas,* while the brahmans admit generally that they settled in Canoje. If it could be *proved* that any of the race first came from the west and settled in or near the *delta* of the Indus, the above origin assigned to them would be rendered more probable, or in other words, less improbable than that of their having proceeded directly from Shinar.

The Siamese divide the brahmans into two tribes also ; Bryant indeed says that they occupied the country on the banks of the Indus,—the Sinthus of the Periplus,—Guzerat or Juzerat, or Cutch,—Cambaia or the Bay of Cham, and that they were Lords of the sea, or Palæ Semunder the sea of the Pali or Sclandwe or Serindeb or Singhala Dwipa, or Seilan or Ceylon. But it is known that brahmans *descended* from the Punjab and settled at the mouth of the Indus, and I think it probable that from thence they prosecuted voyages to the eastward in concert with Arab navigators.

After all however, it is certain that we have not far advanced in the

* J. A. S. B. Vol. IX. pp. 40—74.

investigation of the ancestry either of brahmans or the more original tribes or people of India, since the day when the revered founder of our Society electrified the world of letters by his speculations, and his keen and logical discourses on Asia, in its widest sense. A rapid glance at some of these profound essays or discourses will perhaps shew that until we can produce adverse facts, we shall have to rest, whether contended or not, with what he has laid before us regarding the ancient civil, political, religious and literary history of the brahmans and Indians. He sets out by informing us that “the first Indian monarchs can *hardly be supposed* to have reigned less than three thousand years ago.—Of course there is no proof of this position.

“The Dabistan describes a religion called Hushang, which was long anterior to that of Zeratusht, and several of the most eminent of the Persians, dissenting in many points from the *Gabrs*, and persecuted by the ruling powers of their country, retired to India, where they compiled a number of books now extremely scarce ; (then) further, that a Dynasty termed Mahabadian (q Maha) had been established for ages in Iran, before the accession of Kayumers.* Hence,” adds Sir W. Jones, “the Iranian monarchy must have been the oldest in the world.” It seems to me that if these emigrants were brahmans or men who afterwards assumed that name, we ought to find the earliest brahmanical worship to correspond with the religion of Hushang, which supplanted the ancient religion of Iran or Deism. The Vedas sufficiently attest that the first brahmans were sun and fire worshippers, yet perhaps retaining faint perceptions of the ancient Deism of Persia, which had itself been debased by polytheism, and thus affording a nucleus around which they could weave their own tangled and plural system of gods and energies, male and female.

“Every just and benevolent man, whether he perform or omit these (ceremonies) is justly styled a brahman.”† Thus the Vedas gave no religious superiority to brahmans.

But the sun was that “great effulgent power which is Brahma himself, and he is called the light of the radiant sun. It is the greatest of lights, and is the principle of life in all beings.‡ The sun, says Yajunyawalcya, is Brahmé, and this is a certain truth revealed in the *Vedas*.”§

* Sir W. Jones’ 6th Disc. on the Persians. A. R. VI. p. 48, et seq.

† As. Res. Vol. V.

‡ Ditto ditto, p. 349.

§ Ditto ditto, p. 353.

The sun is the *eye of the universe*. There is none greater among the immortal powers. From him the *universe proceeded*, and in him it will reach annihilation. It is the three irradiating powers, or forms, Brahma, Vishnu and Rudra.*

The Malays derived from the Hindus, I suppose, their name for the sun, *mata hari*, the eye of day.

“The court language of Iran about Mohammed’s time, and when Anusharavan sat on the throne of Persia, was called Deri, while that of the learned was named *Pahlavi*. The former was only a refined and elegant dialect of the Parsí.

Besides these, there was a *very* ancient and abstruse tongue known to priests and philosophers, called the language of the Zend, because a book on religious and moral subjects had been written in it. That is, the character was the Zend, and the language Awesta.

Hundreds of Parsí nouns are pure Sanscrit, and very many Persian imperatives are the roots of Sanscrit verbs.” The corollary or deduction made from these facts does not yet seem to have been adopted by the learned, “that the Parsí was derived, like the various Indian dialects, *from the language of the brahmans*.”

If the brahmans came from Persia, it is more likely that *they* should have brought the Parsí, or the Pahlavi along with them.

But “the Zend bears a strong resemblance to Sanscrit, and the Pahlavi to Arabic.” Hence, according to this assumption, the brahmans brought the Zend with them.

Could any of the characters of the ancient inscriptions decyphered by Prinsep be traced back to one of these Persian Alphabets, as they have been formed into Sanscrit? “The Zend language was at least a dialect of the Sanscrit, approaching perhaps as nearly to it, as the Pracit, or other popular idioms, which we know to have been spoken in India two thousand years ago.”

This date would fall about the period when it is *probable* the third Buddha Kassapo may have appeared.

“The oldest discoverable languages of Persia therefore were Chaldaic, from which Pahlavi was derived, and Sanscrit, and when they had ceased to be vernacular, the Pahlavi and Zend were deduced from them respectively, and the Parsí either from the Zend or immediately from the *dialect of the brahmans*. But all had perhaps a mixture of Tartarian.”

* As. Res. Vol. V. p. 354.

Where we have no unbroken clue to guide us, the truth cannot be indisputably established, and it seems meanwhile more consistent with the plan on which learned investigations in our days are carried on to consider the Sanscrit, or its parent language and character, to have had their origin in Persia, or in any other region where the Zend had prevailed.

“The primeval religion of Iran was a pure deism.* That which succeeded it was Sabian.”

In the first we find that in addition to the inculcation of the belief in one supreme God, maker and continual governor of the world—in a pious fear, love and adoration of him, and a due reverence for parents and aged persons, and a fraternal affection for the whole human species, it is enjoined to *have a compassionate tenderness even for the BRUTE CREATION.*

This last injunction is a prominent one in the Buddhist creed, but has no place in brahmanism or sacrificing Hinduism.

If the brahmans did emigrate from Persia, then it appears to me, as I have already stated, that it must have been after—but not long after—Sabianism had become the popular worship—because the brahmans were originally, as settlers in India, if we are to judge from their earliest books, Theists, and Sabists combined—for if they did not publicly worship the Host of Heaven they venerated the sun and moon, and perhaps other celestial bodies. But at what period the Sabians took precedence of Theists in Persia does not clearly appear, or we might perhaps fix the period when the brahmans arrived in India. The brahmans and Persians both worshipped, as many of the former now do, *fire*. But I apprehend that the Hushangites, who fled to India as above quoted, probably formed a *distinct sect there from the brahmans*, and retained longest the Unitarian doctrines. Sir W. Jones deemed the doctrines of the Zend to be quite distinct from those of the Vedas.

“Thus it has been proved by clear evidence and plain reasoning that a powerful monarchy was established in Iran long before the Assyrian or Pishdadi government. That it was in truth a *Hindu* monarchy, though any may choose to call it Cusian, Casdean or Scythian—that it subsisted many centuries, and that its history has been engrafted on that of the Hindus, who founded the monarchies of Ayodhya and Indra-

* As. Res. Vol. V. p. 58.

prestha—that the *language of the first Persian Empire* was the mother of the *Sanscrit*, and consequently of the *Zend* and *Parsi*, as well as of Greek, Latin and Gothic; that the language of the Assyrians was the parent of the Chaldaic and Pahlavi, and that the primary Tartarian language also had been current in the same empire, although, *as the Tartars had no books or even letters*, we cannot with certainty trace their unpolished and variable idiom.”

In this paragraph the brahmans and Hindus appear to be blended into one people. The present Tartarian alphabet is plainly derived from some derivative of the Sanscrit; Iran or Persia is the common country (it is continued) from which migrated the Hindus, Arabs, and Tartars; and it is considered highly probable that the Britons came from Armenia, the Goths or Scythians from Persia, and the Irish and old Britons from the borders of the Caspian.*

“The Hindus, Chinese and Japanese proceeded from some ancient stem distinct from the Arabian and Tartarian one. But all the three stems may be traced to Iran, as to a common centre, from which it is highly probable that they diverged in various directions about 4000 years ago.”†

However delightful to the imagination these speculations may be, we must, I fear, for want of clear demonstration, resume our stand on the threshold of induction.

In some such terms then as the foregoing, the respective claims of brahmans and Buddhists might be consigned to abeyance, until the learned should have decided upon them by an induction from all the facts which history and research can afford, and the claimants be allowed to revel in the meantime amongst the sweets of antiquity respectively.

But I cannot resist the temptation which Dr. Roer’s lucid exposition offers, for making a few concluding observations on the discussion in question, and in so doing I will follow up the arguments by which he wishes to convince us that the brahmans have won the field.

He observes that through M. Burnouf’s researches we have returned to the central source of the Buddhist writings, from which all others, *with exception of the Pali*, are only radiations.‡ This position

* As. Res. Vol. II. Disc. on Hindus. † Ditto ditto, on Chinese p. 381.

‡ No. CLXVII. J. A. S. B.

we could wish to see placed in a clearer light; and to have the Pali allotted its definitive position in Indian theology and literature. He admits or reports that the language of the Sanscrit books on which M. Burnouf's learned work rests is barbarous. But we would also desire to learn their earliest dates and those of the character (or characters) in which they are written, so that a close and rigid comparison might be instituted betwixt that language and character or characters, and the Pali and the language it clothed. The most barbarous of the two in both of these respects might perhaps seem entitled, after such a scrutiny, to claim the preference. If the Pali and Sanscrit were alike barbarous at any given period, the brahmans could claim the merit of having brought the latter quickly to perfection; that the Buddhists, fond as they were of recording their religious history in the Magadhi, were induced at last to adopt it; although perhaps this may have been partly owing, as I have before noticed, to heretical innovations.

If the Sanscrit and Pali character and language should be found to have been the same originally, then we should have one clue to trace Sanscrit to its fountain, namely, the most ancient specimens of Pali extant.

We are still, I think, deficient in proofs that "the Buddhist religion overcame that of the brahmans, on its *own ground*." It might rather be said that the former outstripped the latter in the race—for there was no hostility apparently betwixt the followers of either, but rather a philosophical and polemical rivalry, which did not, until a long time had elapsed become debased into a mutual virulence and hatred.

It is asked, if Buddhism has been able to overcome the intellectual barrier with a great number of the Hindus, the tenacious adherence to their religious impressions—and also why should christianity not be able to exercise a similar influence over the Hindu mind?

To answer this question we require a much more correct knowledge than we now possess of what the Hindus and Buddhists, particularly the former, really believed and practised in ancient times. The Hindus of those earlier days were not trammelled to the pantheistic car, which they now so painfully, although willingly, drag along. Hinduism then was not transcendental, but an incipient monster with undeveloped energies, neither prepared to compel veneration nor to attract it, by diffusing around itself a false glare and splendour. Besides, the Buddhists and Brahmans had one or two connecting links. Both had appar-

ently worshipped the same God and Genii originally—if not up to the very period of their dividing in doctrine; and the Buddhists still retained these Genii or Devatas, in their theogony, although divested of the superior potency formerly accorded to them—while both had lost sight of the supreme Ruler of the universe. Numbers of the Buddhist Priests too were brahmans—and some of these were learned in the Vedas, containing doctrines which all the people who emigrated to India from ancient Persia must, during a certain period, have known and followed.

It can be little matter of wonder then, that multitudes of the people should have followed these converts, much less so if these were priests—and I have not met with any mention of a regular brahman priesthood at the time when Buddha the 4th, preached his doctrine. But it is evident that the first converts at least were brahmans—men well versed in brahmanical learning, as all the learned Buddhists appear to have been from the earliest times of which any Buddhist records remain, and were led to adopt Buddhism from a conviction of its merits, founded on open discussion and a rigid comparison betwixt these and those of their own dogmas. If a few brahman priests of acknowledged sanctity were at the present day to expose the falsity of Hinduism, without being persecuted for so doing, and to preach the *moral-ity* of christianity, as Buddha did that of some foregoing *Indian* system,—we may suppose that the faith of the multitude would be shaken, and that numbers would separate and follow the new apostles, even although the fetters of superstition are much more firmly rivetted upon them now than seem to have been those which shackled the Hindu of B. C. 543. For one God worshipped then by the Hindus, they have now tens perhaps.

A new Avatar if now promulgated by the *brahmanical priesthood*, acting in concert, would probably consign the whole of the Hindu Pantheon to Naraka.

But these men, supposing even that they are not sincere in their present belief, have no worldly motive, nor are likely soon to have one, for repudiating their gods. There are no christian kings, and Adhi Rajas, at whose right hands they can sit as counsellors, astrologers or priests—the door of ambition is for them but narrow, and the objects which at best could be gained were it laid widely open are, when

put in comparison with their former actually enjoyed, moral and political ascendancy, paltry. Further, it appears from Dr. Roer's critique that "the Sanscrit words in the Nepal records have often acquired new acceptations."—Q. May new ideas not have followed?

"Buddhism," observes Dr. Roer, "is no primitive religion, but one of those which are founded on the development of preceding religious opinion." Granted to a certain extent.

I have already quoted some authorities whose opinions regarding the Buddha of the west have, when combined with what we know of the religion as it existed and exists in the east, led me also to nearly the above conclusion. I mean that the Buddhism which was re-established by the ministry of Gotama Buddha, was one which originated at some undefinable period before his advent, and that it was attempted to be engrafted on Brahmanism (at a more recent period) however, under the form of a moral improvement, and also that the authentic records we yet possess, do not clearly define the *original* line of separation betwixt Brahmanism and Buddhism.

It appears to me also that the Hero worship of the west was at some remote period propagated in India by emigrants from thence, as well as the worship of Devas, corresponding to the primitive deities of the brahmans, and that this idea was first subsequently adopted by the sects of philosophical moralists, who being desirous of perpetuating the names of the prominent reformers, gave each of them an apotheosis, and then raised Chaityas and towers over their relics on models handed down to them from ancient times.

It is obvious that we are as yet quite in the dark as to who the people were who inhabited India before either Brahmans or Buddhists appear on the stage of India.

Even should it be proved that Brahmanism is older than Indian Buddhism, it will not follow that Hero worship was not still more ancient, not only considered generally, but with special reference to India. It is easy to perceive how the adoration of a man can be an after-thought and have no material connection with his doctrines, which last may have been handed down to his age from one far anterior to it.

In the wide range of religions where shall we find an original one? Such superstitions as are the results of natural impulses or the markings of fear or the airy forms bodied forth by the imagination and incipient

reasonings of infant races, are of no account here, however interesting to the natural and moral philosopher, became traceable both to natural and moral causes. All the ingenuity of antiquarians has not yet unravelled the tangled skein of religions. Possessing many features in common, still how various do their sources appear to be—or if traced back to what seems some common point, how suddenly are they found to diverge again;—what blending of their dogmas, what perversions, what improvements, what grand conceptions, what debasing and demoniac ideas and creeds,—what asceticism—what grossness—what epicurianism do we not find almost blended together. For the primitive religion we must go back to the first days of man. The question, observes our author, put by the brahmans to their opponents, why Sakya Muni did not appear in any former period, was cut short by the doctrine that the universe always is under the government of a Buddha.

But it is probable that they also replied, that three known Buddhas had preceded this one, and they might, and perhaps did argue, that [like the Jewish prophets] each successive Buddha succeeded to the mantle of his predecessor; and that these Buddhas were separate identities, and not avatars of a single person, although *each* Buddha became in fact according to the doctrines, an incarnation of himself under a new condition of existence.

The Buddhist religion doubtless appertains to “an advanced stage of society,” and so *did* brahmanism. But this does not materially affect the comparative antiquity of either of the opposed parties, unless one of them can be proved to have emanated from the other. But if this religion be distinct from brahmanism, it may have been either gradually evolved during the advance of society, or borrowed at once from a more highly civilized western one.

In the first instance it would be vain to endeavour to trace it back to its original elements. The other may or might yet be traced, could we discover any records of the first intercourse betwixt the people of the east and west. As India was quite well known to western nations [at least by name] about the period of Buddha Sakya, and B. C. 623 to 543, we may admit the probability of a much earlier intercourse betwixt the two.

Hinduism, as it now exists, is a new religion, and so comparatively is or was brahmanism, if it was a shoot from a western one, whether Persic, Chaldaic or Scythic.

In the Vedas the sun and sky were worshipped, and Sir W. Jones* acquaints us that the popular worship of the Persians under Hushang was purely Sabian, having succeeded to pure Theism.

It is hardly necessary perhaps to speculate deeply as to where the brahmans obtained the ideas of their later gods.

In the year of Christ 50, there were astrologers from India practising their profession at Rome, and in the first *centuries* the Hindus (q. brahmans rather) sent many embassies to the Greeks and Romans, and some of these reached Spain, Alexandria, and Egypt.†

The term first centuries is somewhat vague, but it may still permit us to suppose that the pantheistic rabble of the Hindus had not then been created, and the Greeks, Romans, and the people of Egypt and other countries they visited may have supplied them with the conceptions, which they afterwards matured. Nay, we do not know that the earliest Indian travellers were not those men who were then or who afterwards became Buddhists. Buddhism was general throughout India very *long before* and during the first centuries, and its votaries being imbued with a spirit of inquiry, it is more likely that they should have travelled to the west than that brahmans should. Dr. Buchanan acquaints us that certain Jain tribes affirm that they came from Arabia. This may be true, and we may suppose that they brought with them the worship of Brahmá, and perhaps of the other gods of that country, for they were not *then Jainas*, these being a heretical *Buddhist sect*, although it is possible they may have been originally hero-worshippers. This emigration, if true, would support the ideal or theoretical case I have already proposed. “To this day,” (1811) observes Wilford, “there are certainly followers of Brahmá, and brahmans in Arabia, where many old names of places are Sanscrit or Hindí.

Wilford observes that “the Mahrattas, a numerous and respectable tribe of brahmans and Khatris, are acknowledged all over India to be foreigners from the *western parts of Persia*, who left their native country not 1200 years ago,” (before 1811.) Does this not shew that they only followed a long beaten road; and if it be true, it bears me out in the supposition that emigrations from the earliest ages fled to India from the horrors of war in the west, or from the love of change. In A. D.

* Tr. A. S. B. Vols. IX. and X. p. 99.

† Ditto Vol. X. p. 99, 100.

‡ Ibid, 98.

* Ibid, Vol. II. Disc: the Persians.

500, the Roman Exarchs or Governors were obliged to fly from Syria to India, and certainly by sea, as the Romans were at war with the Persians to escape from an invasion by the king of the Hemiarites. Wilford assures us also "that so early as B. C. 189, or before it, Hindus of both sexes were not uncommon in Greece: that they were settled in Colchis, and that the Sindi of Thrace came originally from India. The Indus was so named from a Hindu Mahant who fell into it during Manhius' expedition at the above date and was drowned." The probability, I will venture to say, is that the river had originally that name, or one very like it, and thence those who dwelt on its banks were called Indus, but long subsequent to the location of the brahmans there.

The constant intercourse which from a remote period had been kept up betwixt India and the western nations, was put a stop to by the advance of Mahometanism.

The embassies from Porus to Augustus, and from Pandion king of the southern parts of the peninsula, sufficiently attest the intercourse 24 years B. C. at least.*

It is difficult at this day to determine who the people called Hindus by the *westerns*, were. The brahmans occupied the banks of the Indus and Cutch, and all western foreigners must, when approaching by land or by coasting the shores of India, near to the Indus, have encountered probably and chiefly men of the tribe of brahmans.

It is a question who were these early Hindus. It is more than probable that they were Buddhists, for, as Wilford observes, ancient travelers make no mention of the monstrous statues of the Hindus. The historians of Alexander take notice of the Sibœ carrying among their standards the image of Hercules, whoever he was.†

This, if not a statue or representation of a Buddha, was at any rate one of a hero, or famous man, for these statues mentioned by Philostratus as having been cut out of the rock beyond Hurdwar, had nothing monstrous in them, any more than those made by Grecian artists in the Punjáb.

If it was with the brahmans that "a regular trade was carried on from the accession of the Ptolemies to the throne of *Egypt*, to the conquest of that country by the Romans, and which did not cease until the middle of the 7th century, when the growing power of the Musalmans put a stop

* As. Res. Vol. X. p. 109 et seq.

† Wilford, As. Res. Vol. X. p. 111.

to it,"* and if we look to the fact that the brahman tribes were most probably subjects of the Greek kings of Bactriana who ruled, according to Wilford, the countries on the banks of the Indus as far as Sirhind, during a period of 129 years,—from 255 to 126 B. C., and if we also advert to the intercourse the brahmans must have thus had with the people of Egypt, and with all the ancient countries west and N. W. of India, we shall have no difficulty in accounting for the mythological medley which brahmanism, and, now, Hinduism present.

The bent of the brahmans towards traffic in the early stages of their progress in India shews that they were by no means a religious tribe. It appears to me that it was from Surat and Gujerat or Bombay that the first brahman merchants penetrated to China, which must have been, long perhaps, antecedent to A. D. 414, when Fa Hian sailed with them to that country. But the natives of India generally were attached to trade, although those who resided on the western coast of the peninsula, and on the W. and N. W. frontier of India, doubtless became the first traders with the western nations.

The features which were common to the gods of Greece, Italy and India, have been so forcibly delineated by Sir W. Jones, that speculation as to their general identity seems quite superfluous. He has not decided to which of all these the priority is due. But he himself, and many others, have shewn the resemblance which the Egyptian deities had to the gods of these three nations,—one which could hardly have been fortuitous, and he was the first to disclose the close connexion which existed betwixt the ancient Persians and the brahmans. Persia too was well known to the Greeks and Romans,—from all which, and from the consideration also that we have every reason to believe that the Pantheons of these two last nations were erected before the brahmans had fairly plunged into the vortex of idolatry, it might be surmised that the Greeks and Romans took the lead. But this would not prevent us from also believing that an interchange took place in the gods of the three people, or rather perhaps a reciprocal modification of them, after the direct intercourse betwixt Greece, Italy, and India had been established. It appears that the brahmans and Buddhists were always ready to learn the arts, sciences and religious opinions of the Romans, and the latter we know were ever prone to adopt and incorporate foreign deities into their system.

* Wilford, *As. Res.* Vol. X. p. 114.

And as to the Hindus generally, they had an immemorial affinity, observes Sir W. Jones, with the old Persians, Ethiopians and Egyptians, the Phenicians, Greeks, and Tuscans, the Scythians or Goths, and Celts, the Chinese, Japanese, and Peruvians.

For many centuries after the conquests of Alexander, there seems to have been an eager desire in India for foreign arts and sciences, curiosities, instruments of music, wine, and even beautiful women. Those who desiderated such objects however were not Buddhists after Sakya's taste, and must have been either brahmans or people from some other body of Indians. If the Greeks made statues while in the Punjab, the brahmans may have adopted the gods or heroes there represented. For many interesting facts respecting the ancient intercourse betwixt India and western nations, Col. Wilford's learned Essay V. (Vol. X. T. A. S. B.) may be consulted.

The gods and devatas, who still grace the 22 heavens of the Buddhists must, if we believe and can prove that the latter were a heretical offset from brahmanism, be the same as those worshipped at the period of the separation of the two sects, by the brahmans. This would serve to fix the date in the above supposed case.

But I cannot suppose that the chief of these Devatas, Indra, was born out of India, although some foreign ideas may have been mixed up with his history.

From the following extract from the Milinda Raja, the qualifications of Indra might have entitled him to Nirvana. His apotheosis however had a lay character, rather than a religious one. He was doubtless the ruler of some powerful empire, the capital of which was perhaps termed Meru, which name, after his Dynasty had passed away, remained as a mythological region.

The seven names of Indra.

1. Maghawa, which appertained to him while yet a holy man in this world.

2. Burinthatho, when he was in the full exercise of the virtue of charity.

3. Sakko. Because of a benignant and humane disposition.

4. Wasawo Phalawo. When he built houses for the poor and was in other respects munificent.

5. Sahassa Netto. When he had become perfect master of *one thousand Pali* works.

6. Suchampati. When he was married to Suehida Nari.

7. Dewanna Mintho. When having finished his actively virtuous life on earth, he ascended to Tawatinsanang, and became the ruler of all the Devatas in that heavenly region.

His Consorts were :—

1. Suehita—celebrated for the gardens she formed. She made one Nandawana 500 yojanas square.

2. Sanantha,—famous for the wells and tanks dug by her orders.

3. Suthamma,—who erected Caravanscrais and other buildings for travellers, and also affixed spires to Dagobas, these first being five long eubits in length (or height 30 feet.)

4. Suchada,—renowned for her virtue.

Indra is also called Sakó—Purindadó—Dewa Rája.

Wajirá Paní—Sujanpatí.

Sahassakó—Mahíndó.

Wajirawudhó—Wasawó.

Dassasatta Ñáiyano—Tiduwadíbhú—Suranathó—Wajirahathó.

Bhutapatí—Maghawá.

Kosiyó—Indó—Wassaghú.

Pakasassano.

“The native country of Buddhism is India—and as there was no other religion but brahmanism, *this* must have been its parent.”

If this shall be proved it will not perhaps be difficult to shew what *that* form of brahmanism was to which it owes its existence. As I have not met with the proof of this position I beg to suspend my own judgment. But it is my steady opinion that the worship of a *man*, which is the coping-stone of the *present* Buddhist system, as it could not have been derived from the brahman under any view of the subject, had either very long indigenously prevailed in India, or had been brought from the west, some time prior to its being generally adopted, I apprehend that both religions were originally based on the deep abstraction of infinite power, and illimitable intelligence. But we have not sufficient means for tracing the changes which the Indian mind underwent from the period of the 1st Indian Buddha, perhaps three or four thousand years ago, up to the 4th Buddha, or how many theolo-

gical theories may have been alternately accepted and rejected during that period.

M. Remusat seems to have believed that Buddhism travelled from the banks of the Ganges to central Tartary—in the neighbourhood of the lake Lob,—amongst the Ouigours—at Khotan, and in all the small states to the N. of the Himalaya mountains—also in Affghanistan—Oudiyana—Gandhaza, &c. But was there not a germ, if not a fully expanded blossom of this religion existing long before away towards Persia and Turkistan? Buddhism, he also observes, [the Buddhism I suppose of Sakya he means, originating in central India, between the mountains of Nepal and the rivers Jumna and Gogra] was carried back by tradition as far as the tenth century before our era—and monuments of which still subsist, and the others now in ruins, confirm the testimony of these traditions.*

It would be satisfactory if we could discover a solid base for the latter supposition—for I am not aware than any of the decyphered Pali or other inscriptions will carry us back so far.

He then, in his 6th head of facts, states, that “we are satisfied that Buddhism had penetrated into the Dekkan in very ancient times, and there exist there from that period excavations in the form of temples, the construction of which is carried back to epochs so remote as to be comprised within the age of fable.

It would, as supporting my argument, be rather gratifying to us to find these assumptions confirmed—but until the full and solid grounds for them are exhibited, it will be prudent I think to withhold our assent.

M. R. first says (head 5) that Buddhism had penetrated to the mouths of the Ganges A. D. 500—as if it had only been then able to get so far from its source in the N. W.; and if his sixth position be correct, then the Buddhism of which he sees traces in the Dekkan, could not have been that which Sakya promulgated, or rather which he is believed to have originated—but may have been a prior stage of Buddhism—that of one of the three Buddhas before Sakya.

He goes on to say that in Fa Hian’s time the Ceylonese counted 1497 years since the Nirvana of Sakya Muni.

Now the Mahawanso of Ceylon declares the period of the Nirvana

* Lieut-Col. Sykes quoting M. Landresse, Tr. R. A. S. Vol. XII. p. 256—7 et seq.

to have been in B. C. 543, and Fa Hian was in Ceylon in about A. D. 410, so that the first of these Nirvanas was in B. C. 1087. Lieut.-Col. Sykes, who quotes M. Landresse in his account of M. Remusat's researches, shews* that the circumstances attending Sakya Buddha's early career—his ministry, and preaching, his death, and the belief of his followers, all tend to induce a strong belief that there had been Buddhas preceding him, while Fa Hian positively asserts that a large tower in Oude contained the entire bones of Sakya Muni's immediate predecessor, *Kasyapa*.

M. Burnouf's sources of information are two—the Sanscrit Buddhistical works of Nepál, and the Pali or Magadhi works of Ceylon.

It appears to me that Sanscrit was not employed by the Buddhists to record events until a period when heresy was rife, there being no less than 22 sects. Now it remains perhaps to be proved that the Buddhism introduced into Nepál, and the Himálaya, was not that of one of these sects,—was not propagated by men originally brahmans, and who were retrograding towards their first faith, or rather rapidly framing another. He was tempted with every kind of gratification by a Rakhsa or demon to abandon the priesthood, but resisted. He had also the special gift of being able to walk upon the waters, and Devils were afraid of him. I do not see how the *dates* of these Sanscrit works therefore will yield solid data for a summing up, although they may greatly aid investigation. A comparison of the substance of them with that of the Ceylonese Pali books may do so. But if any suspicion shall seem necessary in regard to these Sanscrit MSS. I cannot understand how the ancient elements of Buddhism are to be sought for in what is common to both these classes of books, for it was as easy for the writers in Sanscrit to omit what was foreign to their purpose, as it was for the brahmans to falsify and suppress in the manner they did, the records of Buddhism which fell into their hands. Scythianus, who had studied at Alexandria about B. C. 190, visited India by sea and brought back *four books* :† what were they? The Vedas most likely.

It is curious that Buddha did not write any thing himself—like Christ and some of the Prophets, he preached the doctrines leaving to his disciples the task of editing it. We have therefore no means of

* Tr. R. A. S. Vol. XII. p. 261.

† J. A. S. B. Vol. IX. p. 215—217.

knowing whether this task was faithfully executed, and it was, we may suppose, from the different versions given of that doctrine, that heresies arose. Franklin, in his essay (p. 12) observes that when Buddha was about to die he is said to have addressed his followers to this effect :—

“That what he told them about spiritual affairs and a future *state* were mere allegories, as there are neither rewards nor punishments after this life.” I have never during my intercourse with the Buddhist priests heard any such a recantation even hinted at—quite the reverse. And indeed it must have, if it was ever broached, been one of the heretical doctrines, for it is upon the metempsychosis and a future state that the whole Buddhist system hinges, and by which its moral maxims are enforced. But I find something analogous to the above in the Ratana Kalapa, under the head Mára, who was the King of the Maras, and who persecuted Buddha, but was defeated, so that people who act wickedly are likened to the Mára.

‘Buddha said that there is no Yama or king of Naraka (Hell) but that the wicked see him in their minds’ eye only.’

Yama Raja Pathamang Dewadutang—Sámanusasetwa.

In one of the versions of the Milinda Raja in my library, it is stated that there were six Múnis—Purana Kassapé—Makhali Kosa (Ghosa) Niganda—Nataputo—Sunjoyo Wélattha Buddhó—Ajiwókesa, Kánbaló and Pakúddho.

Milinda then visited Purana Kassapé and asked him to inform him who was the protector of the world? The priest replied, the earth, or ground. Again, by what power will souls be precipitated into hell? To this question there was no reply. Therefore Milinda reflected that there were no wise and learned men in Jumbo Dwip. Pursuing his questions, he asks, will the good actions of men be rewarded and the evil ones punished after death? Answer, neither—but as the mortal is here, so in every way will he remain hereafter the same. Milinda—Will this take place or be, where the individual may happen to have been maimed accidentally or for crime? No reply.

After this there were no wise men in Sagal for twelve years, and if any Arrahans appeared before the king he drove them away. When that period had elapsed, it became known that a great assemblage of krores of Arrahans had taken place in Himala at Rakhita-thalla, and that their superior was Assagutta Thero. These persons then proceeded

to the mountain named Yuganthara, in order to arrange about having a learned discussion with Milinda Raja. The question had been thrice put to the assembly, that a polemic champion was wanted, but no one stepped forth. The Superior then said, that there was in Kétumti, in Indra's heaven a Devata named Maha Séna, who might be able to compete with Milinda. Upon this the assembly adjourned to Indra's heaven. Indra inquired if the king had not been before in his heaven—and on being assured that he had been there, Indra intimated to Maha Séna that he should descend to the earth from the Loké heaven. The Superior of the Arrahans persuaded this holy person or Deva to undertake the visit out of regard to the religion of Buddha. The Superior inquired on his return if all the Arrahans had accompanied him—when Rohana replied that he had staid behind, being absorbed in contemplations. For this breach of duty he was, as a punishment, sent to a brahman's village on the *further side of Himala*, there to afford ghostly instruction to Nagaséna, the son of the brahman Sonúttara, for 7 years. Thus after portents on earth and in the heavens, Nagaséna was born.

It happened that this brahman had appointed another brahman to be the preceptor of his son, and had required that the youth should be grounded in the three Veds and the Silpa. The youth Nagaséna had heard read but a small portion of these sacred volumes, when he became impressed with a perfect recollection of their whole contents. These Veds consist of Niganda (pa), Sarakkha, Ittihassa (pa), Viyakurna (pa), Lokayatana (pa), Maha Súpinna Lakhana. The boy inquired of his parents if there were any other Veds, but was told that there were no more. He accordingly dismissed his teacher, and having read the four; (Q. 3?) Vedas, he thought them of little value, and that all true wisdom and knowledge had disappeared from the earth.

While absorbed in these reflections Rohana arrived at his father's house. The youth asked him why he wore patched garments? I am, said Rohana, Babbajit or Athit, or he who has got rid of sin and the passions. What then do you know of the Silpas and Shastras? I know the chief Silpa. Why do you shave the head? There are 16 acts relative to the head, which must not be attended to, and which can only be avoided by the tonsure. Head-dress, cleansing the hair, curling it, operations on it with iron instruments, anointing it, nikkhi, also adorning it with flowers, scenting it; twisting and tying it (nimasa).

Huritakki, purifying it with this fruit.

Amulaki, and so with this fruit.

Muttika palibod, ditto ditto with this earth.

Pinning of the hair.

Gundaka palibod, purifying it from any unpleasant smell.

Khaché, the same.

Kapaka palibod.

Nahapnka—washing it with water.

Moreover, parasitical insects are disturbed and killed by these operations which are thus sinful.

“But,” said the youth again, “Why do you wear patched garments?”
 “Because,” replied Rohana, “by wearing unpatched clothes a person continues attached to the world.”

Rohana then takes Nagasena to his abode at the Vihara of Wijampa, where they remained one night; then they proceeded to Rakhitalena, where were assembled the Koti satanan Arahantanan purato patu rahosi of Arahans. This place was in Himala. Here Nagasena was ordained as a priest—and Rohana, at his request, began to instruct him in the doctrine (of Buddha) beginning with Kusalá Dhamma—Akusala Dhamma—Abbiya Katha Dhammá. When Nagaséna had learned these three preliminary, he immediately recollected seven other Maha Pakarani, namely, the

Abhi Dhamma Saugini.

Wibhauja.

Dhatu Katha.

Puggulla Panyati.

Katha Wúttú.

Yamaka.

Pathama.

The Arrahans had resided for 20 years at this abode, and Nagasena had attained to the age of 20 years. He was then made the chief priest or Uppasampada.

Nagasena became dissatisfied with his spiritual guide, because he could not impart more knowledge to him than he had already acquired. Rohana knew what was passing in his pupil's mind, and reproved him for it, saying that he would not forgive him for his want of confidence, unless he would go to Sagal and humble the (spiritual) pride of Raja

Milinda. Nagasena replied, "Not only will I humble him, but all the princes of the world, should they confront me."

As it was the *rainy season*, Nagasena went to visit Assagutta, a Muni, and said to him, "I have been sent by my Gúrá with his respects : you know his name and he knows your's." But although the young priest staid three months with the Muni, the latter did not converse with him (on religious matters), but advised him to go to Asokorama or Wihar, or monastery at Pataliputra, where, he added, resided the priest Dhammarakit—where religious instruction would be given to him. This place he said was distant one hundred yojana.

Before Nagasena set out an old woman who was *cook* to Agragutta [was this not a forbidden luxury to devotees ?] on listening to Nagasena's recital of the *Purm Dhurm*, became inspired, or a *Soda patimagha*.

He consequently joined a caravan of 500 carts which were under a merchant, Pataliputta Koséthi, who received religious instruction from Nagasena and became *Soda Patimar*.

When Nagasena had reached Asokarama, he found there a learned Bhiku named Tissadatta, who had come from Lanka. These two paid a visit to Dhammarakit, and they were taught together by him the *Pali Digha Nikaya*. In three months they were perfect. Nagasena now became an *Arahan*, when the earth quaked, &c. After this, at the desire of the multitudes of *Arahans* of *Himala*, he returned to them. Here he received instructions to proceed to Sagal and humble the pride of *Milinda Raja*. He was on this occasion escorted by 80,000 *Arahans*.

Milinda Raja, about this time, asked his ministers if they knew any learned priest. They replied, that they knew one named *Ayúpala*, who lived at the *Sangkéya Pariwena*. His majesty paid this priest a visit, accompanied by 500 persons. In the course of the conversation which ensued, the *Raja* tried to elicit the qualifications of his guest, but the latter kept silence and retired out of respect, to his cell. The *Raja* laughed, and asked if *Jumbo Dwip* held no other so learned as himself?

In the 2nd volume the king learns the name of Nagasena, and is greatly disturbed on first hearing it. He accordingly visits the priest, and a long dialogue ensues, which would occupy here too much space were I to insert it.

In illustration of these remarks I shall quote the *Ratana Kalapa*, under the head *Ubhato Kotito Panha*. Here it is inculcated that as

Buddha is in Nivana, it is 'useless to worship him, and only requisite to venerate his memory, and follow his precepts. Statues too are only useful for refreshing the memory, for as the husbandman sows grain in the earth and reaps the harvest, so he who believes in Buddha and follows his doctrines will be saved. The earth and Buddha are both *per se* inert.'

Buddha too led a wandering life, followed by his disciples. As Christ quoted the prophets, so did Buddha, and his disciples the four Buddhas who preceded him. Buddha visited the infernal abodes, like Christ, and he was treacherously poisoned at a supper, and although by his prescience aware of his doom, yet he strove not to avert it, so did Christ, and he ascended like Christ to heaven, and will at the end of the five thousand years be succeeded by the fifth or last Buddha, so Christ is to come again in the last day.

The metempsychosis is a radical portion of belief both in brahmanism and Buddhism, and has a ready type in Egypt. A misinterpretation of the nature of Christ, of his, to be (alternate) changes from the divine and spiritual essence to physical existence, might under circumstances of priority of time, have led perhaps to the dogma *just* adverted to.

"No supreme superhuman Buddha," observes Dr. Roer, "or Bud-dhas, or Adhibuddhas, are found in these Nepál books."

I have already expressed my belief that the apotheosis of the Bud-dhas was borrowed from what was apparently at first a distinct form of worship, that of heroes and great benefactors to the human race.

From what can be gathered from Buddha's own oral discourses or sermons, their sole aim was to direct his hearers in the road to Nivana, a condition of eternal rest, undisturbed by migrations, or moved by any thing external or internal.

If future angelic or god-like super-power had been one of his objects or his chief one, then the tiers of the Buddhist heavens might have been filled with thousands of such spiritualities, all eternally exercising the power of gods, and influencing, according to the creed of the degenerated Buddhas of later days, the destinies of man, and thus rivalling the Hindus in the multitudes of their gods.

Buddha himself, agreeably to the Pali Thatsa-chatta, in my possession, passed through ten states of existence, ending with that of Sakya Muni. Thenceforward, he became dead to the universe either of mind

or matter. His followers might gratefully endeavour to perpetuate his name and his sympathy with their moral deficiencies, by connecting these with splendid Chaityas and temples and colossal statues, but his ministry had been accomplished, and he could in no way influence their destinies, or happiness, but by the example and precepts he left behind him. His object,—that which he had pointed out to his followers as the sole aim of all his actions, had been, as he and they believed, attained, when he was on the point of entering Nivana, which, like the negative Elisian beatitude of the Vedanta school, consisted originally perhaps of a total absorption into the divine essence, thus losing all identity.

The study of the simple Sutras, according to M. Burnouf, will throw much light on the connexion of Brahmanism and Buddhism.

I shall not hazard an opinion as to the nature and scope of the Indian epigraphic monuments lately elucidated and ascribed to Buddhists. When this very interesting branch of antiquarianism shall have been so proved and analysed as it ought to be, it will be perhaps time enough for a final decision. If these shall ever be awarded to the brahmans, they will probably exhibit the latter under very different phases of religious and moral character, than we have been accustomed to view them in.

It would meanwhile be satisfactory to learn if there be in existence an undoubted specimen of the Sanscrit character of a date anterior to the oldest existing Pali character. The brahmans may not have cared much about epigraphs, but if they were a race to whom India was destined to owe its religion and social polity, some vestiges of the written character in which these doctrines were to be preserved would, one might suppose, have been left on some less perishable material than leaves or paper.

It has not been proved how castes originated, or when. If caste existed over Gangetic India and the Peninsula at the time when the brahmans were confined to the Punjab, it must, I think, be admitted to have done so independent of the latter. As I have before hinted, the brahmans probably found the nucleus of the institution as derived, according to Sir W. Jones, from Persia, extant in India, on their first intermeddling with its civil affairs; and readily availed themselves of so convenient a weapon for dividing and ruling.

The Peninsula of India must however have been far removed from even the first feelers which they pushed out before them, and assuredly if Buddhism did not descend to Hindustan from the N. W., but was indigenous there, its first types, emblems and monuments ought to be also there found. I believe there is no one who does not allow that *Brahmanism* (not Hinduism) if it ever reached at those early times the Peninsula, pervaded in the first instance the regions of central India, and perhaps those bordering on Guzerat, and that Hinduism appeared on the Peninsula at a much later period than Buddhism. Why the brahmans did not at first proceed there also has not been shewn by any ancient records, and this might lead to the inference that they had really then no regular priesthood, and were therefore careless about making proselytes.

It seems to me, that until proof to the contrary shall be advanced, it will be safest to consider all the most ancient Buddhist Chaityas as having been clustered towards the countries in, or bordering on the Punjab, and if Buddhism did not at the periods of their erection prevail in southern India, that some religion other than Buddhism or Brahmanism, must be sought for in it; allowing for the probability at the same time, that hero-worship may at some remote period have existed in southern India independently altogether of both. Should even Buddhism be found to have arisen amongst the brahmans, there is nothing to prevent us supposing that man-worship was brought along with them from Persia or some other western region.

The Nepál texts were compiled or written when Hinduism had made several rapid strides, and the sanctuary of Buddhism had been invaded by both open and concealed heretical enemies, and we therefore do not, and perhaps cannot, know to what extent reliance is to be placed on these Nepál books—especially as in them “the whole brahmanic society, with its religion, castes, and laws appears.” (p. 796.) We know that the heretical Buddhists to the eastward tolerated, if they did not venerate, the Hindu gods and the converse as to the Hindus there in respect to Buddha.

If the Hindu Pantheon, with its complement of male and female deities and inferior Devatas, had actually been erected at the period of Buddha's advent, where are the remains of its Pagodas? where are its epigraphic and other records on stone, brass or other metal? It was natural that

the Buddhists, had such existed, should have passed them over in silence ; but very strange and inigmatical that the brahman, — whose sacerdotal rivalled their political ambition, should have hidden their towering heads under a humble mud cabin.

The transition period, if such there was, had not apparently passed when Buddha appeared, for he did not discard the brahman.

Admitting even that the Brahminical society had reached its acmé in Sakya Muni's time, are we to consider that society as embracing more than a merely fractional portion of the Indian population—or as extending beyond the tribe of brahman? Baron C. Hugel says, “that there is no doubt of one fact, that when Alexander was in the country of Taxila, the people neither belonged to the Brahminical or Buddhist faith—as they ate at his table, and *did not burn their dead*, but (like the Parsees) gave them to be devoured by vultures. Hence,” he adds, “the people were of the same religion as the Parsees, and it would be worth something could the latter be identified with the brahman.” I do not quite apprehend who are here meant by the people. The brahman had certainly some connexion with Persia—and so had the original Indians I suspect, as has been already alluded to.* But Sir W. Jones has commented fully on this subject, as I have already quoted.

There was no prohibition I think, in original Buddhism, of its votaries eating with any other class, and the present Buddhists to the eastward do not object to sit down to table with Europeans.

And were all their gods and goddesses and suite of minor divinities indeed worshipped by the people in the midst of which Sakya lived with his ascetics? constantly and exclusively worshipped by all castes? If so, Buddhism must have had no existence at all when Buddha appeared. We require to have such gods or deities as did exist in the minds of the people, selected from the Buddhist works, which after rigid inquiry, shall be found of the greatest antiquity. All I have seen regarding the gods in the Buddhist Bali works of Siam seem to have reference chiefly—if not only, to Brahma, Indra and Devatas ; although the gods of the Hindus have been *subsequently* mixed up with their system.

It is quoted from M. Burnouf that “the Kshatrya caste also existed at the time of Sakya, from which the kings emanated.” But Indian history, such as it is, exhibits many kings who were not of this caste, and who were served by brahman.

* Baron C. Hugel's travels in Cashmír and the Punjab, page 24.

If the brahman caste had been all-powerful, all the rulers and dignitaries of the land would have belonged to it.

If the Brahmanical tribe was *itself* divided into castes, then there were two bodies under this denomination,—the Brahmanical and the Indian, which, if proved, would at once shew that caste came with them, from Persia or some other contiguous region,—and if any one could be a brahmana, an anchorite or an ascetic, and a teacher of the Brahmanical mantras, there could scarcely have been any regular Hierarchy. It is not likely that we shall ever learn when the brahmans ceased to be what Fa Hain termed them, a small tribe of foreigners,—for their march to power was insidious. Sir W. Jones informs us that the Mohsan states in his writings, that in the opinion of the best informed Persians, who professed the faith of Hushang, distinguished from that of Zeratustht, the first monarch of Iran, and of the whole earth was, *Mahabad*, (Maha?—a word apparently Sanscrit,) who divided the people into four orders,—the religious, military, commercial and servile, to whom he assigned names unquestionably the same in their origin with those now assigned to the four primary classes of the Hindus.*

If we were to admit that Sakya Muni had three predecessors, and to allow only a hundred years to have elapsed betwixt each, we might fix B. C. 843, as about the time when Buddhism was first promulgated, and in such case, where ought we to place the brahmans at that period?—not to the south and S. W. of the Punjáb? If dissent had not also sapped the foundations of Buddhism, the brahmans could never perhaps have risen to power, and that dissent became the more dangerous inasmuch as to *Buddhism*, it embraced men who were brahmans well versed in the Vedas, and who being fully informed of all the weak points of Buddhism,—for no popular feeling was wounded, and no political institution, caste included, was assailed by Buddhism; on the contrary, it was, while it endured, a very popular faith, and we have its present prevalence over Hindu-China, Japan and partly China itself, as a proof of the tenacity it now possesses over the human mind, and which it probably originally did possess, until force subdued it. The Indians rivetted the chains already forged for them by the brahmans, when they abandoned the freedom and equality of Buddhism, and placed the mighty engine of civil and religious thralldom, that of the castes, entirely in the hands of the *Hindu* priests, or brahmans.

If the brahmans, when Buddhism was advancing, had possessed but a fraction of that power the Hindu priesthood now has, there would have been no Buddhism within the area of its influence. They must then have feared the people, and the latter must have had no serious, if any, obstacle opposed to a change of religion. In fact, the whole of Indian society, brahmans included, seems for a long period to have been fermenting with opposing philosophical, religious and metaphysical theories, which prevented the public mind from settling down to one belief, and it was a mighty point gained by Buddha or the Buddhas, when he, or they, drew off the minds of the multitude from vain antological speculations and ethnical absurdities and grossnesses, and directed it to the plain, although perhaps not equally attractive path of ethology.

It is observed (p. 807,) that Sakya attached little importance to religious forms or to the offering of flowers and perfumes. If it be meant by this that flowers and perfumes *were Buddhist offerings in the last Buddha's time*, to whom were they offered? They must have been so to a *prior Buddha*. If such offerings had no existence until after Sakya's death, this Buddhism could only be properly said to have commenced from that last period when these honors were paid at his shrine. But I agree with Dr. Roer in believing that there must have been statues of the three* Buddhas previous to Sakya's time; and this, whether such persons ever existed or not—I have already stated my opinion that they did exist within reasonable periods gauged by the moral necessities of the Indian population, or any other one amongst whom they lived, although the objection might be started that they were merely the exponents of Astronomical or Cosmographical periods.

That which has in the west been called Buddhism, or a derivative from it, such as Druidism and the religion of Odin or Wodin, and perhaps other religions, have been assigned almost invariably to some region of upper central Asia; Indo-Scythia generally. The Buddhism of India therefore must, if connected with any more western one, have been much more ancient than Sakya's system, or in other words, the parent of it. The Goths brought with them from Indo-Scythia to the west the mythology of those religions bordering on Persia and Hindustan.†

* I suppose 4 is a misprint.

† Faber's Cabiri, Vol. I. p. 290.

The Egyptians had not only two kinds of written character,—one popular—the other Sacerdotal, but two sorts of *sacred sculpture*—one simple, like the figures of Buddha and the three Ramas, the other allegorical, like the figures of Ganesa, Isani, &c.* Here we have the externals at least of Buddhism and Brahmanism when contemporaneous.

Druidism was, according to Davies, simply the worship of men—deified after death. Like Brahmanism, it took a long time before it became sanguinary—and only became so after the Phenecians, as Faber informs us, led Colonies to Britain. Druidic man or hero-worship was corrupted, says Davies, into the worship of the sun, moon, and stars. Hence issued the deities of Chaldea, first, then Egypt and *thence* to the east or India, or Tibet, Britain, Tartary, Asia and Siam, Ceylon, Japanese Isles, China, Siberia, Russia, Scandinavia and the N. of Europe. Thirdly, to India, Scythia and China. Fourthly, to Rome, Europe, Germany, Gaul and Britain. Fifthly, to Greece. The Druidical religion is a ramification of Hinduism. Should he not have said of Buddhism? The first part of the above paragraph closely accords with some parts of the ancient Persian system of religion. Francklin assigns Tartary as the birthplace of the Druids, basing his supposition upon physiognomy, or rather on their facial and craniological conformation, and that Buddhism reached the Persians and (from the neighbourhood of Afghanistan perhaps) before A. D. 700.

The pyramids of Egypt have been shewn by explorers to have been erected as mausoleums for the mighty dead. The Tower of Belus might have been built for a similar purpose. The Israelites in their wanderings betrayed a tendency, to imitate that pyramidal type.† One author has informed us that the *Meru* of the Buddhists is the tomb of the Spirit of heaven, his bones having been scattered all over the world and being afterwards collected like (those of Osiris), were enshrined.‡

The Cuthite Ethiopians expelled the Mizraim from Egypt [or aborigines] and they raised the pyramids. This nation became afterwards Scythæ or Scythians, and were esteemed the oldest nation on the earth.§

* As. Res. Vol. II. p. 273.

† Prichard's Egyptian Mythology, pp. 29, 30.

‡ Tr. A. S. of B. Vol. X. p. 128, et seq.

§ Franklin's quotation (p. 154) of Bryant's Analysis.



REMAINS OF AN ANCIENT TEMPLE AT MULLOTE PUNJAB

⁷ *Stans* *perpetuando* *pro* *curia*

FIFTY TWO. *

Fig. 1.

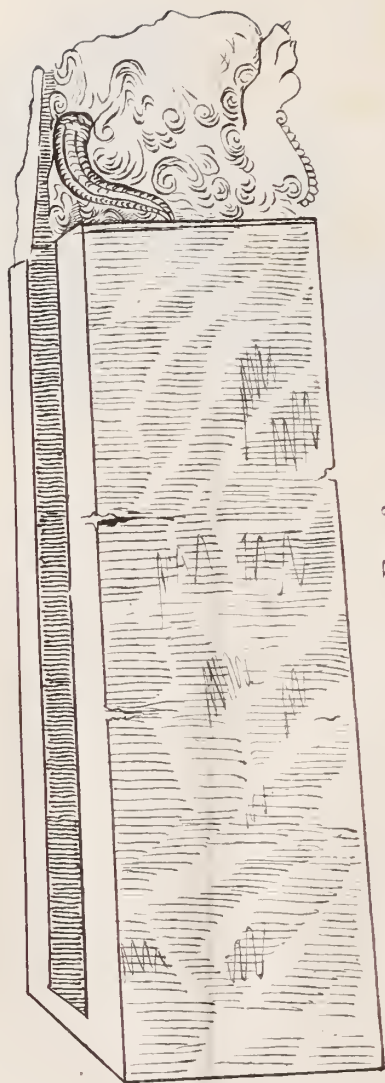
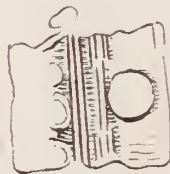


Fig. 3.



Fig. 2.



The Ethiopians have colossal statues of *priests* eighteen feet high.* The Egyptian qualities of the sun and moon were five: spirit, heat, dryness, moisture, water and air, which were converted into *five* gods, and the five Buddhas.

I must claim the indulgence of the learned for having hazarded so many crude reflections, especially as (before noticed) I quite disclaim any pretensions to Pali or Sanscrit scholarship. Dr. Roer's attainments in oriental literature entitle his remarks to close attention, and although suspending my own judgment as to the main object of controversy, I have not been the less gratified by their perusal.

*Remains of Greek Sculpture in Potowar, by Capt. JAMES ABBOTT,
Boundary Commissioner, &c.*

I had been detained some days upon the table-land above Pind Dadem Khann, had visited the salt mines at the base, and the antimony matrix at the summit of Mt. Kurrungli, and had witnessed the annual Hindu purification in the celebrated Fountain of Kuttass, one of the eyes of the earth. I had fixed my departure for the morrow, when I heard of an old site in the neighbourhood and visited it, expecting little recompense, owing to former frequent disappointment. It is the summit of a knoll of white limestone on the left bank of the rivulet which escapes from the fountain of Kuttass. The glen is the wildest of that neighbourhood, having probably been selected on that account for the site of a temple to Ammon. Abrupt limestone ridges wall it in on two sides.

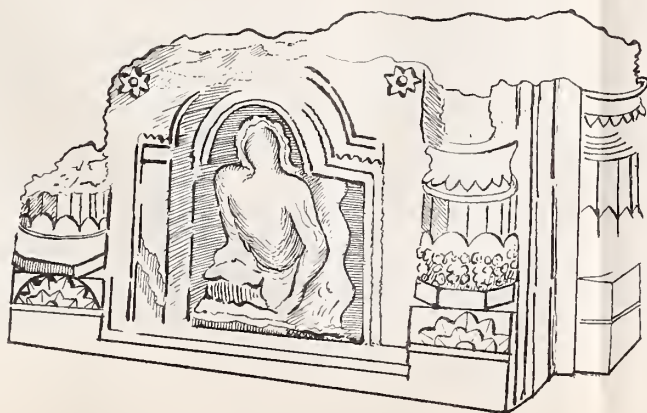
The Muhammedan faqueer whose ancestors have occupied this site about 300 years, strenuously denied that it contained any sculpture; and although the basement, of which some stones are still in place, gave promise, by its simple finish, of the Grecian chisel, it was long before my search was rewarded by any indubitable testimony. By degrees, however, fragments of cornice, frieze and pilaster, were turned up, and then a sculptured spout (Fig. 1 of the Plate III.) accompanying. I offered a reward for the fragments of the mouth, but all search proved fruitless. A singular mass of sculpture next came to light (Fig. 4 of

* Singly.

the Plate IV,) a trefoil arch shrining a seated figure, so like many of the Indian idols that I despaired of establishing in other minds my own conviction that this temple was the work of Grecian hands. Another weather-worn basso relievo, which in its present state might easily pass for a Satyr or a Hnnoomann, confirmed this fear : but it was dispelled forever when on turning an unpromising block of stone, I found the reverse to be a head of Bacchus or of Alexander in his character of Ammon, (Fig. 1 of the Plate IV.) I cannot express the relief which this afforded me : not as regards my own gradually but firmly established conviction, but on account of the triumphant evidence upon which I give it utterance.

When Tod's *Rajasthan* first issued from the press, I was struck with the resemblance in plan and outline, between the Grecian and Rajpootra temples, and this impression was confirmed as I became more intimate with the architecture of Western India. Still there appeared no possible link of connection between Rajasthan and Greece ; the intervening tract of India and Afghanistan exhibiting no proof that the successors of Alexander had introduced their architecture into lands south of the Indian Caucasus ; and the surmises of Tod, appearing to me rather such theories as an enthusiast would desire to establish, than sober structures based upon fact. The architecture of the Bullur and Manikyal Topes first startled me. The pilasters are manifestly Greek, and belong to an order either borrowed from Greece, or borrowed by Greece from India. The sculptured freestone at Jelum, the ancient Bukephalia (see plate in your late appendix) I at once recognised as Greek. A gentleman known to your pages for his botanical contributions questioned the fact of the heads of corn therein represented being maize, upon the generally received idea, that maize was first introduced into India by the Portuguese. But it is so manifestly nothing but maize, which is there represented, that if the Portuguese were the introducers of that variety of corn, this sculpture could not be Grecian : and as the style is evidently that of Greece, the sculpture acquires considerable interest from the question depending upon it.

About a month ago I visited a town called Kala, 4 miles N. W. of Jelum, and found therein a beautifully sculptured column almost precisely similar to some in Rajasthan (see Plate V). This was dug from the site of Bukephalia by a brahman and transported to a new temple



at Kala, under the belief that the figure in the niche is a representation of the goddess Kali. I perceived at once that it was Grecian ; although the interblending of styles would, I foresaw, make it difficult for me to convince others of the fact. The pillars you will perceive, are, as in those of the Tchoah temple, of what may be styled Indian Ionic : the simple volute being exchanged for an acanthus leaf. The figure bears in its left hand what seems to be a cornucopiæ. It is rather clumsy, and savours of the land of Egypt ; but the hands are wrought with perfect truth and the transparency of the drapery is admirable and utterly inimitable by eastern art. The head dress can only be surmised by what remains of it ; the face and head having been mutilated by Muhammedan bigotry. It would seem to have been a turban, and we learn that in Alexander's day, Persian women wore turbans. The bosom is defaced and the sex of the figure is doubtful. There are points of resemblance between this sculpture and the figure of Osiris at Aknoor, (see your late appendix), viz. The bend of the body, its clumsiness and the beading in the huge head-dress. It seems highly probable that the bulk of the imported sculptors were Egyptian, superintended by Grecian architects. The greater proximity of Egypt and her skill at that time in sculpture, as well as the dependence at the outset of the colonies upon Egypt, and their utter separation from Greece by the intervention of Egypt, when that dependence had ceased, rendering this highly probable. Allowing this, we shall not be surprised at the abundant use of the lotos, applicable to temples of Jupiter Ammon, of Osiris and of Bacchus. The lotos ordinarily employed is that bastard kind so common in Bengal, and not allowed to be the Puddum or Kuwwul, or sacred lotos. In the Tchoah temple, however, we have the true lotas unmistakeably and most faithfully sculptured, (see Fig. 3, Pl. III.)

The head (Fig. 2, Pl. IV.) has been severed from its trunk, and as the figures of Bacchus were often effeminate, the sex cannot be determined. The cap resembles that of a Toorcuman* bride, and is manifestly Tartar. It may have represented Juno as Ammonia, or Isis, as the companion of Osiris Ammon. The three plates upon the cap are manifestly of lamb-skin and the sculpture may have been executed previous to the separation of Potowar from Bokhara.

* There can be little doubt that the Amazons or Hummanzun were Torcumuns, and this figure may represent one of them as amongst the attendants of their conqueror Alexander.

The head upon the waterspout seems to me to have been human, and had it not been so, it might have escaped mutilation. The cheeks are full and smooth, and although upon this sketch the peculiar perspective of the fracture gives the idea of a ram's head, there is no such resemblance in the original. My people pronounced it a lion, which the paws and the fulness of the cheeks justified. But I think any European would recognise it as human; the head of a Jupiter Ammon.

The horned, human head, (Fig. 1, Pl. IV.) is manifestly Osiris as Ammon. The face is almost as smooth as that of the female head, but not so decidedly feminine. The rings in the horns are not delineated,—every thing nervous is excluded. The very horns are effeminate, and a chaplet of roses forms the setting. We must bear in mind, that it formed a mere ornament to the entrance of the temple similar to those in Plate II. The query is whether a temple to Osiris Ammon would be externally decorated with figures of the presiding Divinity, or whether that Divinity was not rather the old and sterner Jupiter Ammon of the desert? In this case the female head may have belonged to a companion of the Deity, or to a subordinate. The summit of the female's cap is pierced, rendering it probable that it was a caryatid.

Amongst the true lotos flowers (Fig. 3, Pl. IV.) will be observed a fir apple, one of the Bacchie emblems; but I have vainly endeavored to discover anything that can be pronounced either vine leaf or ivy.

Considering the foundation of this Indo-Greek kingdom by Alexander: the love and enthusiasm of his followers, his untimely death and his politic assumption of Divine rites as the son of Ammon; it is not improbable that temples to Alexander Ammon may have been erected upon the theatre of his exploits, and if so, this is certainly one of them. Such temples would want the emblem distinctive of Bacchus, viz. the vine; and ivy might be excluded for the same reason. But this would exhibit the emblems of the lands of his conquest, the lotos for Egypt and India, the caryatides of Tartary: and the figure of Osiris Ammon might be introduced as subordinate to the conqueror.

I write at great disadvantage so many hundreds of miles from any books of reference, and with a memory almost unrefreshed by study during five and twenty years. It is possible, therefore, that further research may modify some of the theories. But, that the thread of connection between the architecture of Rajpootana, and that of Greece,

is established, admits not of a doubt. And I cannot but regard the fact as of intense interest to the antiquary, tending to affect many of the prevailing theories of the origin of the most interesting race in India.

By pressing my enquiries on all hands, I learned that the architrave, and lintels of a door to this temple had been removed to Kuttass, and introduced into the principal temple there. I revisited that temple at the latest hour of my stay, and found the stones alluded to sculptured into the most graceful and exquisite wreath of flowers, terminating below in a cornucopie. The flower which I know not by name, though it is familiar to my eye, I have seen, unless memory deceive me, beautifully delineated in the inlaid work of the Taz. The workmanship of the Taz has surprised many. Whence the models and who the artists? Some of the models I have found growing wild upon the mountains of Afghanistan; here is another. Doubtless, when the Taz was erected, vestiges of the exquisite taste of Greece were less obliterated. Two centuries of Muhammedan bigotry, yea the single reign of Aurungzebe, being as deadly in its effect upon the graces of social life, as forty centuries of the wear and tear of the great destroyer.

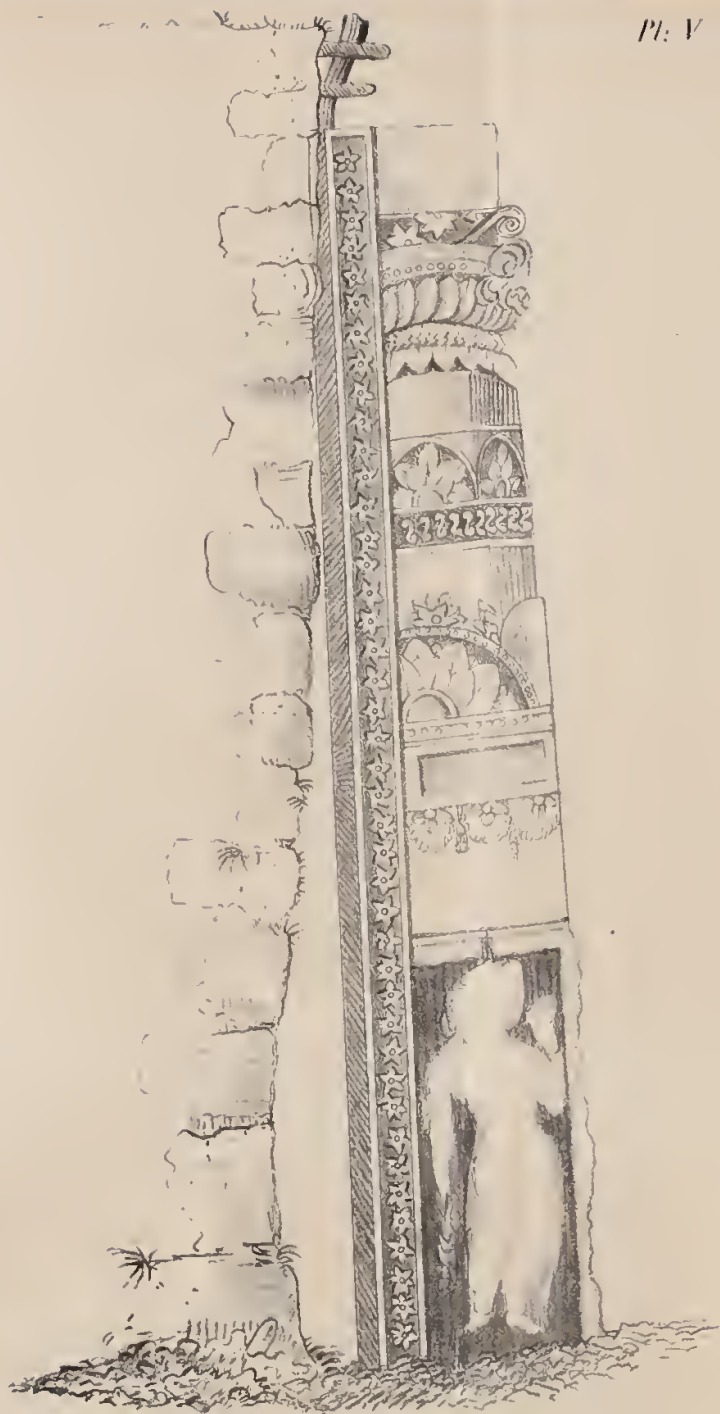
Whilst busily searching the Tchoah site for fragments of sculpture, the faquer observed, "If you look for images you should go to Rám-kata, where they lie thick as shingle; many of them still in their niches." Gathering from his description that a Grecian temple was still existant at that place, I deferred (though much prest for time) my march, and started at once for Rámkata,* distant about 15 miles westward of Tchoah.

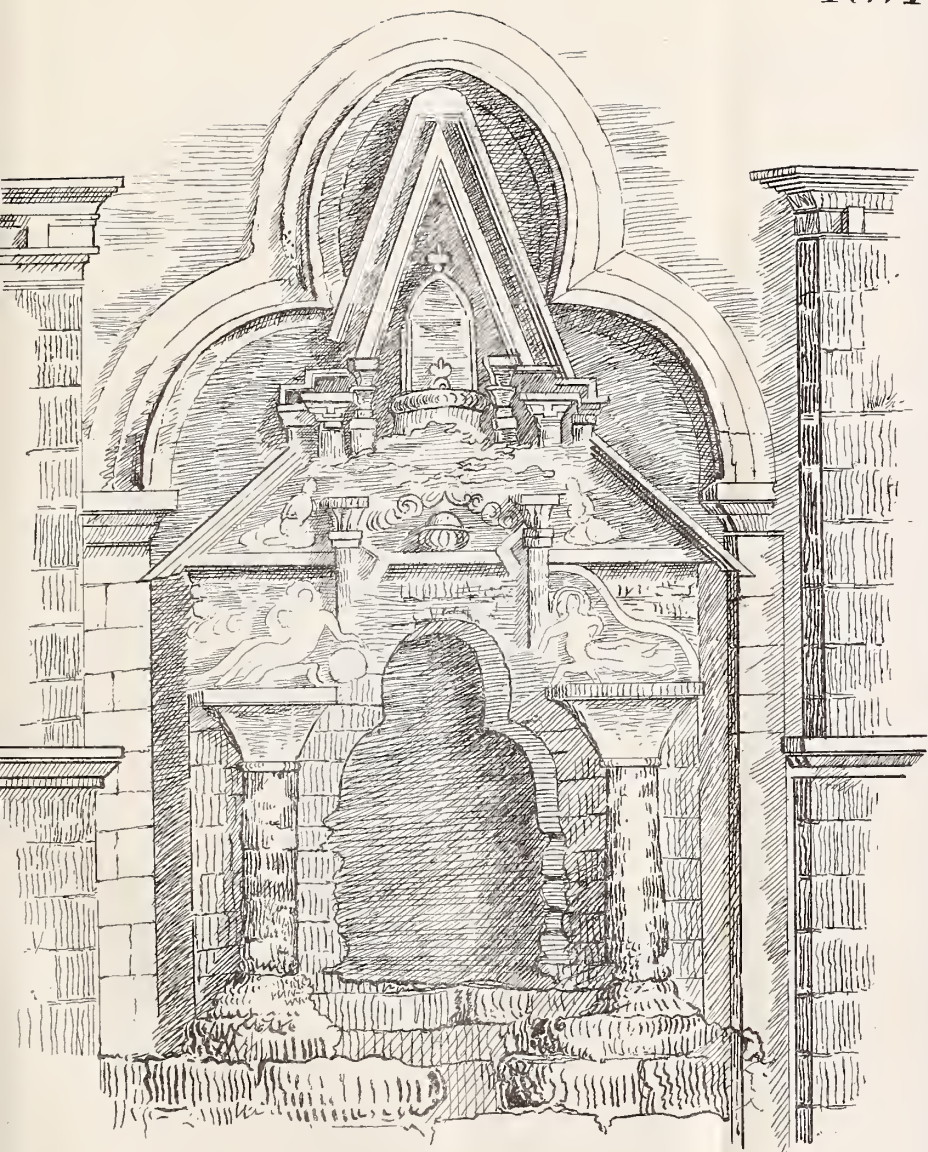
At the southern brink of the table-land of Potowar a small area half a mile in length by a quarter of a mile in breadth is scarped southward by precipices 200 feet in height, and northward by a precipitous acclivity of some fifty feet, resembling upon a very diminished scale the site of Maundoo in Malwa. The rocks are white limestone full of sea-shells and masses of flint and agate. Graceful towers have been constructed on the northern face connected by walls of loose stones: and thus we have a fortress of some strength were it preserved in repair. In the interior, near the southern declivity, at the highest point, stands a ruin which at first sight appeared to me that of a Gothic Church—on approaching, my ideas were strangely confused: for here are fluted

* Called also Mullote and Shahgurh.

pilasters of Grecian order, surmounted with Persian capitals; and between them is a trefoil arch containing the obelisk of Shiva and surmounted by a Gothic gable. And the architraves are supported upon Grecian pilasters, and on either side of the recess of the false door are curvilinear entablatures filled with figures in Roman or Grecian armour, and upon the frieze are rows of alternate sphinx and warrior, and every cornice is Grecian, though often barbarously perverted, and as we gaze upon the fabric, we call to mind those wretched gingerbread temples in Bengal, in which Grecian pillars and cornices have been mixed up with Saracenic domes and minarets and obelisks peculiar to India. The work is in red freestone, but so obliterated by the elements and so defaced by Muhammadan hands, that much is left to conjecture: every head of every figure having been lopped away. In many places the sandstone is dissolved into a mass of red, ochrous sand. My first idea was, that I gazed upon a Buddhist temple built from the fragments of a Grecian fane. But more attentive consideration dispelled this impression. The details (the obelisks excepted) being all Grecian, though sadly lapsed into barbarity. The entablatures of the façade strangely resemble those ugly rigmaroles which disfigure Italian Churches.

The building consists of a Propylon eastward and the Sekon just described, of which the only door faces the east. The façade on this side resembles that in the sketch, with a slight difference. The cell is a lofty, nearly square apartment of sandstone, cemented with lime, but not plastered. The roof is vaulted, but open at summit, having either been so constructed or since broken through to admit a passage, for above it is a modern cell built by a Muhammedan devotee. The sandstone within is in perfect preservation. The interior of the cell is wholly undecorated; but the inner walls north and south of the Propylon are decorated with singular piles of sculpture resembling the exterior façade of the Sekon. They seem to me to offer a key to so much of the style as is not Grecian—the abrupt slope of the upper gable and the mitigated slope of the eaves, presenting a correct outline of a Chinese or Tibetan temple, such as in the mountains we see constructed of timber. The whole seems to me the work of this Grecian colony after its subduktion by Seythia,—their own taste being constrained by edict to conform to the general outline of their conqueror's temples.







I could make but a very hurried sketch, for my leisure was restricted to a few hours, and the wind, the sun and a drizzling shower greatly interfered with the operation. This however may suffice to point the way to further discovery of relics in which Potowar* is evidently rich.

The sculptured stones I had conveyed through the kindness of the Dewan Adjoodia Persaud to Lahore, but as the scientific officer who received them, gave me a receipt only for "a bundle of stones," I have some anxiety about them. I believe I can get them conveyed free of expence to the Society to Delhi or even to Calcutta. They are not very bulky.

In plate VII. is a sketch of a very remarkable marble sculpture turned up at Noshera in Huzara, some years ago, and adopted as a household god by a Kuttri of Kurripoor. I could not persuade him to sell it. It is the Diana Triophthalme, and will exhibit the origin of the attribute of three-eyed to shew for whom it has evidently been mistaken. The third or central eye is delineated in a vertical position precisely as in the pictures of Shiva. The execution is coarse. The block of marble is unfinished and has probably been imbedded in a wall. The natives mistake it for a male figure, perhaps because Chandra (the moon) is male.

My papers are just now in considerable jeopardy, or I should feel disposed to defer this communication until I could make it more complete: but I am warned by subsequent losses.

*Notice of a Chinese Geographical work; by J. W. LAIDLAY, Esq.
V. P., &c.*

Although, as I find after preparing the subjoined extracts for publication, the interesting little work from which they are derived has already been incidentally noticed by M. Klaproth in an article upon Chinese Cosmography in the *Journal Asiatique* for 1832; yet the great interest attached of late years to such productions, may perhaps justify the insertion of this additional specimen, even at the risk of a little repetition.

* I apply the name Potowar to all the table-land between the Indus and Jelum, bounded on the south by the salt range, but I am not certain that this designation is correct. At present the name applies only to the north-eastern portion.

The author of the treatise in question was named *Chhín lœn kwing*. In a short and modest preface, he states that his father being in too poor circumstances to devote his attention to letters, was compelled in early life to push his fortunes on the sea; that there he became distinguished for his knowledge and skill, and had the good fortune to render important service to the expedition sent by the emperor Khang hi for the reduction of Formosa. He was thus brought to the favourable notice of that emperor, and was promoted from post to post, till he attained the appointment of lieutenant-commandant of the coasts of Kwáng tung. He was naturally proud of his profession, and “very impressively” instructed his son while yet a boy in all the mysteries of his craft, “the islands and the shoals, the harbours and the dangerous places, the haunts of pirates,” and other matters of seafaring interest, so that, as the latter assures us, he never in after life forgot them.

Our author obtained in his youth an appointment in the body guard of the emperor Khang hi, and enjoyed an excellent opportunity of extending his geographical knowledge under the auspices of that monarch, whom he describes as graciously taking a personal interest in and promoting his studies. He afterwards held various appointments of importance, visiting officially several of the countries described in the course of his little work, and improving his knowledge of more distant lands by intercourse with Europeans and other foreigners whom he occasionally fell in with. The preface is dated in the 8th year of *Yung ching*, corresponding with A. D. 1731.

The work itself is entitled *Hái kwo wán kían lu*,* or a Narrative of what is seen and heard of the seas and the nations. It is divided into eight chapters, the first of which treats of the sea coasts of China, and is accompanied by a set of maps exhibiting the entire sea front from Kao li (Korea) to the boundary of Cochin China. This chapter is occupied with a rather dry and uninteresting detail of the distances and bearings of different places, and the dangers encountered, as well from the ordinary perils of navigation, as well as from the pirates by whom many parts of the coast were at that time infested. As the author avoids, apparently intentionally, any particulars regarding the country or the people, there is nothing in this chapter of sufficient interest to extract; so that we may pass at once to the second, entitled

* 海國聞見錄

“**TUNG YANG KI** ;* or *An account of the Eastern Ocean*. What [wondrous]† things doth not the vast extent of the universe contain ! The spirits of space,—the 10,000 varieties of living beings,—the sun, moon, and constellations,—and many other things which transcend our comprehension ! All these the Holy Sages have examined and discoursed upon ; and they, too, to determine the four parts, invented the compass,‡ dividing it into twenty-four rhumbs [extending] from near to far, and admirably adapted to enable us ignorant men of after ages to inform ourselves of all the kingdoms of the world : kingdoms extending beyond kingdoms !

Let us describe then the foreign kingdoms of the earth ; the navigation to them ; their people, productions, customs, and what really is to be seen and heard among them ; that henceforward honorable men may be enabled to pick and choose.

Chiu sín§ is situated in the north-east quarter of the world. It adjoins *Shing king*, and lies opposite to *Thin chæn*|| and the country of *Ku ki tsi*. It is divided into provinces and districts, and is the high road through which the tribute passes to the court. Its history and geography have been compiled generations ago, and there is no need of speaking more fully of it here. On the south it is bounded by the ocean, on which is an island belonging to *Yi pan*,* named *Ma tao*,† which may be reached in one night with a fair wind. At *Ming kwan pih* there were disturbances [in former times]. From *Ma tao*, souther-

* 東洋記

† The words betwixt brackets are interpolated to explain the meaning of the text more fully.

‡ According to some Chinese authors the compass (called by them *Chí nan*, the south index) was invented in the fabulous ages of their history. Others refer it to the time of *Ching wáng* of the *Chow* dynasty,—1121—1114, B. C. It is very curious that Marco Polo makes no allusion to so important an instrument, which was unknown in Europe till some time after his travels.

§ A province at the extremity of the Corean promontory.

|| *Thin chæn* is a district betwixt Peking and the sea. The river of *Pe kín* is also so called.

* 日本 *Yi pan*, the spring or origin of day, is perhaps the etymon of *Japan*.

† I take this to be the island lying between the Japan group and the continent, and called *Tsu sí ma* on our maps.

ly, on the magnetic rhumbs *yin, ká, mao*,* is an archipelago of seventy-two islands, all belonging to *Yi pan*, the country of the *Wai nu*.† These maintain a traffic with the Central Kingdom.‡ There is one island named *Cháng kí*, which with difficulty produces sufficient pulse and grain for the sustenance of the inhabitants. There trade is carried on for the public benefit, accounts are kept, and at the end of each year, whatever profit accrues, is equally divided among the people of *Cháng kí*. The king of this nation resides in the north-east part of *Cháng kí*. About one month's journey by land is a country named *Mi ye ko*,§ which translated means "*the capital*." He [the king] receives his title from the court of *Han*.|| He dresses according to the fashion of the Central Kingdom. The people study the literature of the beautiful Central Kingdom, but read it with the accent of *Wai*.*

The king possesses the authority, but military and political affairs are managed by the military chief. The king interferes not in these. He receives sufficient for his subsistence from the tribute and offerings of the country. The military chief† occasionally pays his court to him, and that is all.

Changes in the succession occasionally occur from strife [among the members of the royal family]; but strife never occurs between the king and the military chief. It is narrated in the annals of *Yi pan*, that from the earliest ages of the empire to the present, there has been a succession of kings. In former times a military chief usurped the throne; but the country ceased to produce the usual tribute; the five grains became scarce; and the productive energies‡ of nature became

* These points of the Chinese compass extend from E. 30° N. to east. The bearings appear to be given from Peking.

† Japanese.

‡ China.

§ The *Meaco* of our maps.

|| Of China, from the dynasty of that name.

* *Wai*, Japan.

† This is the *Cubo* of our geographers.

‡ 陰陽 *Yin yang*: which may also mean, the *male* and *female* powers of nature, in which sense the words are used by Chinese writers. On the subject of these powers, Dr. Harland, in an interesting article on Chinese Anatomy and Physiology published in the Transactions China Branch of the Royal Asiatic So-

unpropitious. The military chief then returned to the station of a subject, when the seasons became propitious as before. Ever since that time no military chief has presumed to aspire [to the throne].

All offices are hereditary. Conformably to the customs of *Han*,* the officers named *Chí sí*, receive an allowance of a thousand stone [of rice]. This allowance is ample for their support, and few are induced to transgress the laws. Every year they elect one of their number to be a constable,† who becomes security for the village and receives fifty [pieces of] gold per annum as his pay. They have little to do, and have ample leisure. They apply themselves to Chinese literature, become good scholars, and behave with urbanity. They wear peacocks' feathers in their caps. They attend to the cleaning of the roads and ditches, and to the sweeping and watering of the streets. Their families cannot consume the whole of the food, and there remains a surplus even for the servants to throw away.

The rich make use of carpets of cotton ; the poor, of mats. On the occasion of a census, every family displays more or fewer mats, according to the number of persons. The garments of the men and women have broad collars and wide sleeves. The dresses of the women are so long as to sweep the ground, and are ornamented with flowers traced and dyed upon them. They wear cloth turbans, girdles, and on their feet, short socks to walk in. The men wear sashes, in which they thrust a knife. They wear their hair on the head, and beards ; combing the for-

ciety, remarks :—" It is difficult to conceive a clear idea of the exact mutual relation existing between these two powers, which are said to have produced all things, though they are generally looked upon as a kind of male and female energy, as appears to be implied by the wonderful productive powers ascribed to them. It is probable, however, that these terms, when applied to the animal economy, might often be considered in a similar light, and perhaps with as clear an idea, as the words positive and negative in electricity, which have become so generally used of late years to explain any otherwise inexplicable phenomenon. In both cases, the terms are used to express certain opposing forces, which only become known to us by their effects, when either of them is in excess, but of whose existence we are not cognizant so long as the equilibrium is maintained."

* China, so called after the dynasty of that name which reigned from

† *Kái kun* ; literally, ' street magistrate.' Morrison gives *constable* as the equivalent.

mer backwards, and knotting it behind the neck in a band an inch broad or more; when the hair gets too long, they cut it. The women do not use *chi*,* or flour.† Nor do they wear fresh flowers [in their hair], nor flowered cloth and silk, nor head ornaments, nor ear-rings; —only tortoise-shell combs. The young damsels are [numerous] as the clouds; all day they bathe and perfume themselves. They curl their hair before and behind. Their finger nails are extremely clean; they dread all impurity. Nevertheless, the complexions of the men and women are not to be compared with those of the lovely Central Land, although beyond comparison superior to those of all other countries. Verily, the east produces gay and ethereal spirits!

The people of that country have all double sur-names, only the *Chae fu* have single ones. The *Choe fu* unite the young men and young women in marriage. Those who dwell on the spot, are called *Chae ke chœn*; their burial place is at *Hong tsi shûn*. The men of this nation become impotent after fifty years of age. *Nu* is the name of the tribe; hence they are called *Wai nu*. They in general venerate Fuh,‡ and respect the priests of the Central Nation. They constantly sweep the family temples and the tombs of their departed ancestors. They procure sweet smelling flowers and delicate fruits [for offerings]; or failing these, with venerable priests of Fuh they approach the ancestral tombs.

These people hold their lives cheap. If they have transgressed the law, and the matter become public, they go to a sequestered spot, and destroy themselves,§ so as not to involve others. The laws are extremely severe against quarrels and strife. They speak very gently to each

* A vermilion salve used by Chinese ladies for the lips.

† To improve the complexion.

‡ The Chinese transcription of Buddha.

§ This account is confirmed to the letter by M. Titsingh, who says, “When a person is conscious of having committed some crime and apprehensive of thereby being disgraced, he puts an end to his own life to spare his family the ruinous consequences of judicial proceedings. This practice is so common that scarcely any notice is taken of such an event. The sons of all people of quality exercise themselves in their youth for five or six years, with a view that they may perform the operation, in case of need, with gracefulness and dexterity; and they take as much pains to acquire this accomplishment, as youth amongst us do to become elegant dancers or

other, and when they summon their servants, they do so by clapping their hands.

They have no traffic in slaves ; but they engage themselves for a certain time, and on the lapse of that time they return home.

Two nations are tributary [to Yi pan]. On the north is *Má táo*, which is bounded by *Chiu sín*.* *Chiu sín* pays tribute through *Má táo*, and *Ma tao* remits it to *Yi pan*. On the south is *Sá tsi má*, bounded by *Líu khiu*.† *Líu khiu* is tributary to *Sá tsi má*, and *Sá tsi má* to *Yi pan*. The kings of both islands obey the commands [of the king of Yi pan.]

The seasons are similar to those of *Shán tung*, *Kong nán* and *Chí kong*.

Chang kí and *Pho tho* lie east and west of each other, at a distance of forty *kéng*. *He man*‡ is distant from *Chang kí* sixty-two *kéng*. With a north wind you go from *Wu tao man* ; with a south wind from *Thin thang man*. By *Ma tao* lies the road to *Ting chiu* : *Sa tsi ma* is the road to *Wán thái*. These countries produce gold, silver, copper, varnish, porcelain, every variety of flowers, and printed goods. The sea produces *lung yin heong*, the fish *fu*, bieu de mar, and every kind of [marine] vegetable.

The hills of *Sá tsi má* are full of caverns ; from these issue deep and cold streams admirably adapted for tempering cutting instruments. They produce also horses, and very strong men.

In the times of the Emperor *Ke tsing*,§ there were freebooters from *Wai* at *Sa tsí ma*. Merchant ships from *Yi pan* anchor at *Yung ké*, because formerly eighteen fishermen of *Wai*, being driven by a strong wind to the *Middle Kingdom*, crafty men,|| through their instrumentality, excited an insurrection. They wore beards and shaved the hair skilful horsemen : hence the profound contempt of death which they imbibe even in their earliest years. This disregard of death, which they prefer to the slightest disgrace, extends to the very lowest classes of the Japanese.—Titsingh, *Illust. of Japan*, page 148.

* On the Chinese map this is laid down on the southern extremity of the Corcan peninsula ; *Má táo* must be the island *Tsu sí ma* of our maps. They are not included in the Chinese map.

† The Islands called *Loo choo*, on our maps. I cannot, in the absence of native maps, identify *Sa tsí ma*, but a little farther on we are told it lies to the north of *Líu khiu*.

‡ Amoy.

§ *Ke tsing* of the Ming dynasty, reigned from 1522 to 1567, A. D.

|| i. e. of the Chinese nation.

on their foreheads. They learnt the language of the country in a secluded spot. Others joined these and they commenced plundering. The multitude called them *Wai nu*. They afterwards, being overcome, returned to their own nation, eighteen men in number, and were punished by the king according to the law. From that time to the present, their ships have been forbidden to come to the Central Nation: and although we go to their country, they dare not come to ours. In the history of *Wai** an account of these eighteen persons is given at large.

Proceeding from *Pho thó* to *Cheang kí*, you cross the sea of *Wang yang*, in a direction from east to west. The wind raises vast and dangerous waves. There is an adage that “*Yi pan* hath good things, but *Wu tao* is hard to pass.”

Proceeding from *Hea man* to *Chang khí*, with the south monsoon, you sight *Kí lung shán*,† on the island *Thái wán*.‡ Going north to *Mi khong yáng* and *Heong thín yóng*, you again sight the great hill of *Sá tsí má*, and *Thín tháng*. The course is parallel with the needle. As for the two seas called *Hong yáng* and *Thém yáng*, the first, in the midst, resembles chaff [in colour?], and the latter resembles mushrooms. Hence they are called the *Sea of rice-chaff* [*Mi khong yáng*], and *Hong thín yóng*, the *Sea of mushrooms*. To the south of *Sa tsí ma* is *Líu khiú*. It lies on the rhumb *yæt*,§ and is distant sixty-eight *kéng*. The natives of the interior practise the literature of the Central Nation. The people are weak and the kingdom poor. They produce copper-vessels, paper, sea-shells, indigo, and tortoise-shell, but have nothing else to give in exchange for clothing and necessities for the inhabitants. The tribute passes through *Fu chiú*. These people have long been known and seen, and it is unnecessary to describe them more fully here. *Líu khiú* lies to the south of *Yi pan*. All the waters flow to the eastward. *Chang tsí*|| hath said that water once covered *Mi læ*, but at what time is unknown; and *Chang tsí* never lies!”

The third chapter gives an account of Formosa, and is entitled

* Japan.

† The most northerly cape of the island of Formosa.

‡ Formosa.

§ East 15° South.

|| The name of a Chinese sage.

“TUNG NAN YANG KI,* or *An account of the South-East Ocean*. All the oceans of the south-east begin at *Thái wán*† and lie to the south [of that island].

Thái wán is situated on the magnetic rhumbs *shin sin*.‡ From *Kí lung shán*, on the north, to *Má khi* on the south, it is two thousand eight hundred *li*§ in length. It lies opposite to *Fu chiu fu*, *Heng chiu fu*, *Chæn chiu fu*,|| and *Cheang chiu fu*. It is separated from the island of *Pháng ú** by a navigation of four *kéng*,† and from *Hea man* by a navigation of eleven *kéng*. Its western side is a marshy wilderness; its eastern is bounded by the ocean. This part is inhabited by the vassals *Yin yu*, named the “aborigines of *Pháng pu*.”

The hills are very lofty, and are inhabited by people whose numerous races it were difficult to count. They catch deer and eat them. Yams and roots‡ constitute their staple food. They have no reckoning of years. When the grain is ripe, they prepare a wine from it and regale themselves: and that is their year. By nature they are fond of murder; and they preserve the skulls of men as something precious. They tattoo their bodies, and blacken their teeth. Their races are various. In the morning when they hear the birds sing, they proceed upon their business as the omen§ is lucky or otherwise. The men and the women couple illicitly, and that is their marriage.||

* 東南洋記

† *Thái Wán* is the Chinese name of Formosa. It has generally been applied by European writers to the port only.

‡ 辰巽 *shin sin*, corresponding with S. E. (*sin*) and E. 30° S. (*shin*) on our compass.

§ *Li*: Stadium Sinicum, continens trecentos et sexaginta passus. *De Guignes*.

|| These are provinces of Fo kien.

* A group of islands lying off the coast of Formosa, called “*Pescadores*” by the Spaniards, and “*Visschers Eilanden*” by the Dutch. Valentyn describes them minutely. The largest he calls *Phek no*; no doubt a corruption of *Pháng u*.—(*Beschryv. van Taywan*—p. 37).

† *Kéng* is, in time, the 10th part of the day of 24 hours; in measure, 60 *li* of navigation, as our author himself informs us a little further on.

‡ *Shæ u*. I am doubtful what esculents these may be; most probably yams.

§ *Pi*, properly a method of inferring omens by burning tortoise-shell, but here it means an omen in general.

|| This passage is differently rendered by M. Klaproth:—“*Les hommes et*

In the times of the emperor *Tsung ching*,* the *Red Hairs*, named *Ho lán*,† took possession of the great port of *Ngán pheng*. They erected a fortress of three stories to protect the opening to the sea. They taught the natives to till the ground, and induced them to study the literature of the *Western Ocean*.‡ They carried on a traffic in deer's skins with *Yi pan*,§ in which they employed the natives as laborers, and harassed them so, that existence became intolerable.

In former times *Cheang chí lung*|| dwelt upon the sea. He married a Japanese woman named *Fung sí*, of whom was born *Shing kung*. Many tens of *Wai nu** followed him, and they anchored together at *Thái wán*. From the outer sea they reconnoitred the island, but could do nothing [more]. He therefore made war upon *Kong nan*, *Chi keang*, *Fo kien*, and *Yact tung*,† saying to his son, "Should we be unsuccessful there, [we shall return] and have perfect repose in *Thái wán*." *Cheang shing kung* made war therefore upon *Chín kong*, was repulsed, and returned. He remained watching *Kim mun* and *Ilea mun*, and devising schemes to capture *Thái wán*. He brought together the interpreters of the *Ho lán* nation, named *Ho pan* and *Fu í*, leadsmen of *Lo í mán*, who knew well where the water of the port was deep and where shallow. These directed *Shing kung* to collect the ships and proceed in a body. The *Ho lán* carefully guarded the great harbor of *Ngán pheng*. *Shing kung* set out from *Lo í mán*, and aided by a great inundation of 30 cubits or more, entered and took possession of *Thái wán*. There was a long struggle with the *Ho lán*, because he persisted, saying, "*Thái wán* belonged to our former kings, and is still inhabited by *Wai nu*. Take away whatever you

les femmes se réunissent dans les champs pour les cultiver." Valentyn states that the women perform all the agricultural labor.

* *Tsung ching* of the *Ming* dynasty reigned, according to the tables, from 1623 to 1644, A. D.

† The Dutch.

‡ Europe.

§ Japan.

|| This must be the famous *Coxinga* of the Dutch, who expelled the latter from Formosa. Valentyn gives full particulars.

* That is, Japanese.

† The province of Canton.

possess ; restore us the country ; and your money and goods we will not touch." The *Hò lán*, thoroughly informed of the multitude, went away.

In the twenty-second year* of *Khang li*, *Cheang khe shang* submitted, and the country was entered upon the maps.† *Shing thin fu* became thenceforward *Thái wán fu* ; *Thing peng chiu* became *Chæ lo æn* ; *Wan nín chiu* became *Thái wán æn* and *Fung shún æn*. In the second year of *Yung ching*,‡ *Chæ lo æn* was divided into two, the northern portion becoming *Cheang fwa æn*.

To the south-east of *Shá má khi*§ of the district of *Fung shún*, is *Læ sung*,|| situated on the magnetic point *sin*.* It is a navigation of 72 *keng* distant from *Hé mán*. On the northern side is a mountainous region, which seen afar off resembles the teeth of a saw. Its common name is *Chái ngiu háng*.† These hills are inhabited by aborigines, who belong to *Læ sung*.

To the west, north, east, and south of *Shá má khi*‡ there are many islands at a distance ; but only one island is contiguous to *Thái wán* : its name is *Hong theo æ*.§ It also is inhabited by aborigines. No ships traffic there, because the language is altogether unknown. They live upon yams and roots and the productions of the sea. The country produces gold dust.

There are lofty hills in *Læ sung*, which extend round from the north, at *Chái ngiu háng* towards the south-east. In former times the natives of the Great Western Ocean, named *Kan si la Shi pan ya*,|| took pos-

* A. D. 1684.

† That is, became a recognised portion of the Chinese empire ; as a consequence, of which the provinces seem to have received Chinese names.

‡ 1725, A. D.

§ The most southerly part of the island.

|| Luçon, one of the Phillipines.

* South-east.

† The "ditch or fosse for slaughtering oxen."

‡ This is the most southerly cape of Formosa.

§ There is no other island on our maps that answers to this description, but *Botel Tobago Xima*.

|| Klaproth transcribes these words *Kan szu la Chi pan ya* : hence, in the edition of the original in his hands, the first syllable must have been 𠂔 and not as in mine 𠂔, which may be easily supposed to be a typographical error. M. K.'s

session of it. It produces a grain 5 or 6 *fán* * in length. Many people from *Cheang chiu*, and *Chæn chiu* cultivate this grain and carry it to other countries. They pay an annual personal tax of five or six pieces of gold to reside there. Traders are kept apart in one corner. They are separated from others and not allowed to transgress the boundaries. They, also, pay taxes according to their trade. Of all the foreign countries of the *South-east Ocean*, *Læ sung* is the most prosperous; because the *Kan si la Shi pan ya* of the Great Western Ocean bring silver there for commerce. Silk, silken cloth, cottons, and a hundred varieties of merchandise are sold. The productions of other countries are brought in great abundance. † The established religious doctrines are those of the *Great Western Ocean*. ‡ They have erected fortified cities and fortresses for the foreigners. The country originally belonged to the aborigines; but now it is possessed by foreigners.

When the people of *Hán*§ marry a woman of this country, they must adopt the heretical doctrines, and worship the Lord of Heaven in the church. They use oil and water, and write the character *shi*|| on their forehead. The name of this water is *water of sprinkling*. They burn incense in honor of their fathers and mothers. When their old people die, they go to the church, dig a grave, and there deposit the body. The rich spend more or less money, and bury their dead in the church, within the foundations.* The poor are buried without the walls.

reading is no doubt the correct one, and is the Chinese transcript of “*Castillian Spaniards*.” The “*Great Western Ocean*,” is equivalent to “*Europe*.”

* *Fan*, is the hundredth part of a cubit.

† M. Klaproth translates this passage, “*Le nombre des indigenes s’est accru considerablement :*” an evident mistranslation, “in the island the produce of foreign countries (*fón thu cháng*) is collected in clouds.”

‡ Europe.

§ i. e. China.

|| That is 十, the Chinese *ten*; the cross.

* M. Klaproth translates: “*Les riches font, a cette occasion, plus ou moins de dépense, selon l’état de leur fortune, et elevent des monumens sur la tombe.*” The

text is 基內 *kí nai*, within, on the foundations; which is antithetical to the mode of burying the poor in the next sentence, 塋外 *tseang wai*; “outside the walls.”

Every three years they make a clearance and cast away the bones in a deep mountain stream. Whatever property the deceased may have possessed, is proclaimed in the public hall, and is divided into three parts,—amongst the church, the widow, and the children.*

They have a bad sickness [in the mode of inducing which] the mothers instruct the daughters and not the sons. They have a way of charming cows' hides and smoked hams, and reducing these to the size of a grain of sand. Whoever eats of this his belly swells and he dies. Frogs, too, and several kinds of fishes are in like manner bewitched. They can moreover dissolve these charms and make [the fishes and frogs] leap out of the mouth again.

The crime against nature is prohibited. Even fathers, sons, and brothers are not allowed to sleep on the same bed. The doors are kept open at night, to hear and to see; and the beds and the mats are carefully examined. If they be detected, they are punished by fine.

Early in the morning a bell is rung, and it is day; the markets and the shops are opened for trade. At noon, the bell is again rung, and it is night! The market is closed, all go to sleep, and none venture abroad. In the evening the bell is rung once more; and it is day! Lamps and candles shed a clear light and trade proceeds. At midnight, again the bell rings, and it is night again! The shops and the markets are closed. Every *shi shin*† it is alternate day and night. At noon day they prohibit the whole country [to trade]. Verily it is a market of devils!

After a journey of twelve *keng* you arrive at *Li tsi pha*, and twenty-one *keng* more bring you to *Kan ma li*,‡ to both which places the ships of *Han* proceed for purposes of commerce. South-east of *Li tsi pha* is an island, opposite to which are five other islands, namely

* M. Klaproth has evidently misunderstood this passage; which he translates,—“Ceux qui sont d'une maison riche, cherche à briller dans l'église principale,” &c.

The words translated “*maison riche*” 家資 *ke tsí*, means “*family property*,” and that translated “*briller*” 明 *ming*, means to *proclaim*, as well as to *shine*. Besides, the matter of burying was disposed of by the clearing out the bones in the former sentence, and the author has now passed to another subject.

† *Shí shin*; 6 hours.

‡ Camarines? the S. E. peninsula of Luçon?

Pan ngai, *A tang*, *Sú mú*, *Míu nu yín*, and *Mang kia tsí nu*.^{*} Many vessels from the central nation traffic there also. These islands are inhabited by aboriginal natives, and the productions are the same as those of *Læ sung*, such as deers' horns, cows' hides, nerves, and flesh, Brazil wood, ebony, sandal wood, balsam, yellow wax, swallows' nests, bichu de mar, and various other things. To sail thither you must proceed from *Læ sung* to *Li tsí pha*, and thence southerly. From *Læ sung* to *Pan ngai* are ten *kéng*; to *A tang*, twenty-three *kéng*, to *Su nu*, 24 *kéng*; to *Man kiu tsin nu* fifty-eight *kéng*. The men of these islands are very ignorant; they comprehend nothing; they accumulate no property. They require only a little cloth from the Central Kingdom to cover their persons. Each tribe has its chief to protect the national rights.

South-east of these you come to *Wan lao kao*,† and *Ting kí í*. These two kingdoms are situated on the magnetic rhumb *tsí*.‡ The natives and the various productions are similar [to the preceding]. The distance by sea from *Læ sung* to *Wan lao kao*, is 174 *kéng*. To *Ting kí í* it is 210 *kéng*.

From *Læ sung* due south is a great mountain, the general name of which in *Wu la yu* is the *Great hill of Si li*.§ To the east of this hill is *Su lo*.|| In ancient times it never paid tribute; but in the sixth year of *Tung ching*^{*} there arrived tribute viá *Man*.† To the west

* In the map prefixed to the History of the Philippine Islands, by Martinez de Zuniga, there are 5 or 6 large islands south of Luçon, amongst which only one or two seem to have aboriginal names, namely Panay [*Pan ngai*], Zebu [*Sú mú*?] These are no doubt the islands here spoken of.

† Moluccas?

‡ 15° S. of S. E. — or more properly, E. 55° S.

§ M. Klaproth has I think misunderstood this passage. He makes it—“*De Láu soung droite au sud, est une grande montagne; elle n'a pas de nom général, mais elle est extrêmement étendue.*” The mistake rises from the first syllable of the word *Wu láy yu*, (Malay) being taken in its literal acceptation, “*not* ;” but how the remainder of the sentence is construed as above I do not know. The same mistake occurs further on. The place alluded to must be in the northern part of Borneo.

|| *Su lo* must be the Sooloo Archipelago of our maps, between Borneo and Mindanao.

* 1729 A. D.

† i. e. Fo kein.

of this is *Ki lí man*; and again to the west is *Wan láí*;* these constituted in ancient times the kingdom of *Pho lo*. Proceeding yet further west, is the great hill of *Chæ ko tsú la*, and to the south of that, *Ma shín*.† The extent of these hills has never been ascertained: their interior has never been trodden by man. They produce wild beasts, whose very kinds are unnamed. *Su lo*, *Ki lí man*, and *Wan láí*, are three kingdoms all lying in the southerly rhumbs from *Læ sung*; and to reach *Chæ ko tsú lo* you must proceed south from *Tsí chœn yang* in *Yæ nan*, passing *Kwan læn*, and *Chá phan*, and thence easterly, 188 *kéng*, which brings you to *Chæ ko tsú lo*. To reach *Ma shín* also you must go by *Chá phan*, and *Ká lá pá*, and thence a navigation of 340 *kéng*. From *Hea man*, viâ *Læ sung* to *Su lu*, the distance does not exceed one hundred and ten *kéng*.

Again, to the eastward the sea separates a region named *Mang kiá shí*. From *Ma shín* to *Mang kái shí*,‡ the distance is twenty-seven *kéng*. Further east is *Ting lí í*,§ and on the north-east is *Wan lao kao* and *Su lu*.

Ki lí mán, *Wan la kao*, and *Chæ ko tsú lo* are generally called in *Wu la yu*,|| *O fán*. The natives are very fond of copper gongs; and all their utensils are of copper. They dwell in huts along the banks of rivulets. Their manners are rude. They never remove their swords from their persons,* and are very dextrous in the use of the spear. Whenever it draws blood, death follows. They dress in single pieces of printed or coloured cloth. The merchants of that country travel to and fro in a kind of small boat called *máng kea*. They proceed in company and divide the profit with each other.

The produce of these countries consists of pearls, camphor, tortoise shell, bichu de mar, birds' nests, ebony, sandal wood, sea weed, ratans,

* Borneo, called also *Brunai* on our maps.

† Banjermassin?

‡ Macassar; more properly Mancassar, I believe.

§ New Guinea??

|| *Malayan*. Klaproth again misapprehends the term:—"ces pays ne sont pas connus sous une denomination generale,"—is his version of this passage.

* M. Klaproth translates this passage, "Leurs corps resiste aux coups de sabre!" a translation the absurdity of which is self-evident. The meaning is simply that

they sleep with their creeses. The word he translates "resiste," 離作 *li*, means to remove: and were it not so, the word *shín*, body, is in the wrong position, syntactically, as the complement of a verb active.

and so forth. The natives of *Ma shín* resemble the preceding. They are exceedingly cunning and treacherous. The *Red Hairs* are already in possession of their port, and aim at taking the whole country. The natives are afraid of their artillery, and dare not fight them : but retiring to the hills, secrete themselves, and with herbs poison the upper parts of running streams, and then themselves go out of the way.

The country produces steel, diamonds, pepper, sandal wood, brasil wood, ratans, nutmegs, camphor, lead, tin, birds' nests, kingfishers' feathers, bichu de mar, &c. The diamonds are of five various colors ; those which are golden, black, and red, are the most esteemed, for if they be put at night in a dark room, they emit a clear light. If even put into muddy water, or covered with a napkin, their light will shine through. But they prize most of all such as are as large as a die.* These are valued at 100,000 *leang*.† The natives of the Western Ocean barter for it their most precious commodities.

From *Læ sung* to *Kí lí mán*, the distance is thirty-nine *kéng* : to *Wan láí*, forty-two *kéng*. All these are the foreign kingdoms of the *South Eastern Ocean* : but *Chæ ko chiu lo* and *Ma shín* are not on the road from *Læ sung*, and ought properly to be entered among the kingdoms of the *South Ocean*. The same with respect to *Su lu*, and *Wan láí*, and the chain of mountains running north and south. But we have given them along with the *South-east Ocean*, in order to set forth their position with greater distinctness."

The fourth chapter, describing the countries immediately South of China, is entitled

"NAN YANG KI,‡ or on account of the Southern Ocean.—All the kingdoms of the SOUTHERN OCEAN have the Central Kingdom some what to the east. Examined thence by the magnetic compass, they lie

* M. Klaproth has mistaken the meaning of this passage, which he translates "ordinairement les indigènes portent, comme ornement de tête, un de ces bijoux, grand comme une pièce de damier, et qui a la valeur de cent mille ouces d'argent !" a very ordinary ornament no doubt ! The mistake has arisen from the use of the

word 首 *siu*, "head," as a superlative in the text ; as we say *head* man, for *chief* man. The die here referred to is of a hemispherical shape and about half an inch in diameter or more.

† *Leang*, about a dollar and half.

‡ 南洋記

betwixt the rhumbs *ting* and *wí*; but from the GREAT WESTERN OCEAN of the universe, they lie upon the points *sin* and *tsæ*.*

To speak first of *Ngán nán*;† it immediately joins the Central Kingdom. Its sea bounds *Lím chiu*. Its hills turn towards the north-west, and then south towards *Chim shing*, in form resembling a half moon. The name is *Kwang nán wán*.‡

Under the *Thsín* it was [denominated] *Tséang kwan*; under the *Hán*, *Káo chí*; under the *Tháng*, *Káo chiu*; under the *Sung*, *Ngán nán*, and under the *Ming*, *Káo chí*. It joins, in suecession, both the *Yæt*,§ and *Yon nán*. The manners of the people and their productions have been already described in the historial books.

All beyond *Shan fwa*, *Sin chiu*, *Kwáng í*, and *Chim shing*|| is denominated *Kwáng nán*: for the maternal uncle and brother-in-law [of the Emperor?] having been sent to watch *Shan fwa*, they accordingly fixed upon the fort of *Ma lung kó*, on the north side of a river, and another fort belonging to *Káo chí*, as the boundary. All to the south of *Shan fwa*, as far as *Chim shing*, is the kingdom of *Kwáng nán*, called also *Ngán nán*. The family name of the king is *Yæn*; he springs from a family of the Central Kingdom. The country was formerly ealled *Yi nán kwan*. It produces gold, the wood *nán*, perfumes, lead, tin, cinnamon, ivory,

* M. Klaproth, I think, misconceives this passage. He translates it, “Si l’on examine le moude avec l’aiguille aimantée, on trouve que tout ce qui est situé entre les rhumbs *ting* et *wei* est entouré par le grand océan occidental, et que sur le reste des vingt quatre division de la boussole, il n’y a de terres que par les rhumbs de *sién* et *szu*.” He adds in a note, “ce passage est un peu obscur dans le texte; je pense pourtant en avoir saisi le sens.” A moment’s reflection that the *Great Western Ocean* is Europe, and that betwixt it and the countries here described the *Little Western Ocean* (comprising India, Persia, Arabia, &c.) interveues, would have satisfied the translator that such cannot be the Chinese author’s meaning: nor is there any equivalent in the original for the words *il n’y a de terres que par*, &c.

合天地包涵大西洋按二十四盤分之卽在巽巳矣. *Ting* is S. 15° W. *wí*, S. 30° W.; *Sin*, SE., and *tsæ* E. 60° S.

† Or *An nán*.

‡ Or the *Bay of Kwáng nán*.

§ That is, the two provinces of *Kwáng tung*, and *Kwáng si*.

|| These four countries are in Cochinchina.

fine silk cloth, birds'-nests, fish-fins, the vegetable *chí tsái*, sugar, and other things like *Káo chí*.

Káo chí is named *Tung king* (or the eastern capital); and *Kwáng nán*, *Sí king*, or the western capital. It is more powerful than *Káo chí*. On the south are *Lo láí*, *Tung po chái*,* and *Kwan tá má*. The south-west borders with *Tsím lo*;† the north-west with *Mín tín*.‡ They plant prickly bamboos around their towns. The natives are excellent divers. When a ship of the *Red Hairs*, driven by stress of weather, enters *Kwáng nán wán*, the people of the country send about a hundred little boats, the crews of which carry with them bamboo joints containing a quantity of fine cord. These dive into the water, and having nailed the fine cords to the bottom of the vessel, row quickly away, so as to drag the vessel aground in shallow water. They then pillage and burn her. Now the vessels of the *Red Hairs* avoid coming even in sight of the hills of *Kwáng nán*. Should they behold these, the master immediately tells the mate how the nation practises this severity.§

Proceeding from *Héa man* towards *Kwáng nán*, you pass by *Nán ó*,|| and sighting *Lo wán shán** in *Kwáng tung*, and *Tá chiu theo* in *Khing chiu fu*; cross the *Ocean of the Seven Isles* by the *Chim pa lót* mountain outside of *Kwáng nán*, and so reach *Kwáng nán*. They reckon the navigation to be seventy-two *kéng*.

Káo chí lies to the west of the *Seven Isles*, and to reach it you must go round by the north. From *Héa man* to *Káo chí* is a navigation of seventy-four *kéng*.

The *Sea of the Seven Isles*‡ lies south-east of *Khing tao* and *Wán*

* This is the Chinese named of Camboja. See Crawford, *Embassy to Siam and Cochín China*.

† Siam.

‡ Ava.

§ M. Klaproth turns this passage,—“le capitaine dit à l' équipage.” “Mes amis,

ce long pays là est bien dangereux.” The word 長 *chang*, means indeed “long,” but it belongs to the preceding member of the sentence, and forms with the word

夥 *ho* from a compound meaning “mate.” (See Morrison's Dict. Vol. I. p. 81.)

|| This is the island marked *Namoa* on our maps lying about 70 or 80 miles to the south-west of Amoy.

* In the Canton province.

† Champeilo.

‡ This is that portion of the China Sea situated South of the Canton province

chin. All who go to the *Southern Ocean* must pass this sea. The junks of the Central Nation are not to be compared with those of the *Western Ocean*. These make use of sextants and quadrants to determine the sun's altitude, and measure the time, and so find out the ship's position. The Central People use the compass and the sand-glass, and as the wind is strong or light, fair or foul, determine the number of *kéng*. Each *kéng* is equal to a sea-distance of about 60 *li*. If the wind is fresh and fair, the amount may be doubled. When the current and the wind are contrary, they reduce the reckoning. In this way they know their position. If there be any uncertainty in their minds, they determine their position by the distant mountains, distinguishing upwards and downwards, the forms of the hills; and they use the lead to ascertain the depth of the water. On the bottom of the lead are put wax and oil to try the sand or the mud by touch (contact). Every one of these plans is fit and proper where the place admits of it; but in the *Great Ocean of the Seven Isles*, and outside of *Tá chiu theo*, there are only vast waters, and no hills to serve as land-marks. With a very favourable wind, and the assistance of the needle, this sea may be crossed in six or seven days, when you sight *Chim pa lo* in *Kwáng nán*, and *Wái lo shan* on the outer sea; and thus get the clew again.

Somewhat easterly you come upon [the sands] *Wan li cháng sha** and [the rocks] *Chin li shi tang*.† Care must be taken to avoid being drawn into the gulf of *Kwáng nán*; for without a westerly wind it is impossible to get out again. Such merchant ships as enter it, not being bound for *Kwáng nán*, enter it by the direction of heaven.‡ Goods are taxed excessively; one half the value is not deemed sufficient. The *Red Hairs*, men and things, are not to be found. But they show great reverence from the Central Nation. Hence it may be said, that if you lose but a little, you lose ten thousand *li*.

In the centre of the *Ocean of the Seven Isles*, there is a species of supernatural bird, resembling in form a sea-goose, but smaller. Its bill is sharp and red: its feet are short and green; its tail bears an arrow about two cubits in length. It is called the *Arrow Bird*. It flies towards vessels passing in the centre of that ocean and shows itself.

and East of Cochin China, and in the center of which are the Paracels,—the Seven Isles of the text.

* Macclesfield Bank,

† The Paracels.

‡ That is against their will.

It points [the road ?] to the people ; but if you call, it flies away. At times it seems to hesitate ; if again you call it, it looks about cautiously, and again it flies away and returns. [The sailors] burn paper as an offering to the spirit. It flies round and round, and none knoweth its place. But tradition says, that when the royal *Three Precious Ones** descended, they summoned a bird from the *Western Ocean*, and planting an arrow in it, bade it dwell in the midst of this ocean as a memorial.†

From *Kwáng nán* you pass round *Shán hái* and arrive at *Chín shing* and *Lo líi*. Thence going to the west you arrive at *Tung po cháí*. From *Hé man* to *Chín shing* is a voyage of one hundred *keng* ; to *Tung po cháí*, of one hundred and thirteen *keng*. *Tung po cháí*, though a distinct kingdom, being enclosed betwixt the two kingdoms of *Kwáng nán* and *Tsin lo*, on the east it pays tribute to *Kwáng nán*, on the west to *Tsin lo*. Should it fail in the least to obey these, by water and by land they can invade and reduce it.‡ The natives are *Wu lá yu White Heads*.§ They go nearly naked, girding only the lower part of the body with a piece of cloth called *shæi mán*. The country produces lead, tin, ivory, kingfisher's feathers, peacocks, ocean-cloth, red wood, sandal wood, incense, swallow's nests, sea weed, and rats.

From *Tung po cháí*, a range of hills turns round to the south-west toward *Tsin lo*. From *Tsin lo* you pass round the coast to *Sí tsí*, *Lu kwan*, *Ta nín*, *Ting ka nu*, and *Phang hang*. The mountains separating these from the Central Nation, extend in a due southerly direction thus far, and stop. Again, going round the sea, and the back of the hills towards the west, where *Pháng heng* terminates the hills, and at the back of this is *Yu fuh* ||

* 三寶 *Sán pao* ; the *tri ratna* of Indian Buddhists ; that is *Buddha*, *Dharma*, *Sanga* ; or according to the Chinese the past, the present, and the future Buddha, that is *O mi to fuh*, *Shi kea fuh*, and *Mi le fuh*. Our author seems here and elsewhere to use the term as a proper name.

† This legend is entirely omitted by M. Klaproth in his translation of the chapter.

‡ M. Klaproth. "Peu à peu il est cependant devenu indépendant. Par mer, chacun peut y entrer et le subjuguier,"—a circumstance not calculated to promote its gradual independence !

§ M. K. "Il n'y a pas de mahometans portant le turban blanc."

|| Johore ?

Westward of *Yu fuh* is *Má lá ká*, and the hills behind *Ting ka nu*.

Westward from *Má lá ká*, you enter the kingdoms situated to the south-west of *Yón nán* and *Thían chu*;* namely, *Kó shi thá* of the *Little Western Ocean*.

From *Tsím lo* round the coast as far as *Yu fuh*, every state has its king; but all obey the orders of *Tsím lo*. In ancient times *Lo* and *Tsím* formed two kingdoms. These were afterwards united and formed *Tsím lo*. They commonly worship *Fuh*. The king dresses in clothes dyed with images of *Fuh*. His food is all gilt, and is served on vessels of gold. By land he travels upon an elephant; by water on a boat adorned with dragons and phœnices. The name of their magistrates is *chín kwa*. In the presence of men of rank they sit cross-legged, and bow with uncovered bodies and naked feet. They do not dress in trowsers, but wrap themselves in a *shœi man*. They entertain great respect for the Central Nation, and generally employ the people of *Hán* as magistrates. These superintend the political affairs and the treasury. Their city and suburbs are extensive. The people dwell in houses fronting the rivers. The rivers are full of alligators. From its embouchure to the capital, the river is two thousand four hundred *li* in length.† Its waters are deep and broad, admitting sea-going vessels to enter and depart. It penetrates to a branch of the *Hwáng ho*.‡

* *Thían chu* is one of the Chinese names of India. *Kó shi thá* is perhaps the Portuguese term *Costa*.

† M. K. “Il y a dans le fleuve beaucoup de crocodiles, qui le remontent depuis son embouchure jusqu’ à la residence du roi. Le cours de ce fleuve est de 2400 *li*; ses eaux sont profondes et larges, et les vaisseaux de mer y entrent et sortent. C’est une branche du *Hoang ho*,” &c. M. K. has confused the two sentences, and made the entire length of the river 2400 *li*; a circumstance the author could never have meant, when in the same breath he tells us “c’est une branche du *Hoang ho*.”

‡ Although it is not very probable that this great river reaches the *Hwang ho*, as our Geographer affirms, yet the sources of these streams cannot be very remote from each other. In his *Geography of Cochinchina* the Bishop of Isaupolis remarks: “Maltebrun and many others have placed the source of this river in the province of Yon-nam in China. But I am persuaded that this river flows from the mountains of Thibet. In a short time I have no doubt that we shall obtain proof of what I have advanced. It is indicated in the map of Cochinchina, and the extraordinary inundation of this river about the month of September proves also that the melting of the ice of Thibet, is the cause of its overflowing its banks and spreading its waters

Its shores are covered with extensive forests, abounding in large apes and monkeys, and in beautiful birds whose songs are heard in all directions. The villages of the natives are numerous, and the cultivation is extensive. In the season of cultivation, entire families proceed in boats to dig and sow* [the lands]: and having finished that, they return home, without remaining to weed. When the grain is ripe, they proceed back again by boat, and reap it. The stalks of this paddy are about twenty cubits in length. The tribute is paid in the produce of the soil. As they finish planting the young rice, the waters of the *Hwang ho* come down. The young plants increase with the waters: if these rise one cubit, the rice grows one cubit: if the waters rise ten cubits, the rice grows ten cubits. It is in no wise destroyed or injured. When the waters retire, the rice ripens. One branch of the river enters the Central Kingdom. Its current is very violent. Another branch enters the countries to the west, and turning again through *Tung po chái* and *Tsim lo*, enters the sea with a moderate current. The lands are greatly enriched by its waters, and hence the country is very productive of rice; the very stones seem propitious.

It is generally asserted that they catch deer on the tops of trees. They draw their cattle upon a raised platform lest these too be carried away and lost by the current like the deer. They remain on platforms on the tops of trees. They have huts, too, in the valleys, erected in the midst of the water. They take their cattle up into these. Should a man be eaten by a tiger, or swallowed by an alligator, they respectfully announce it to the native *sang*.† The *sang* utters imprecations, and the tiger approaches; with incantations they throw a cotton thread in

over Camboge and lower CochinChina, and causing the same fertility as the Nile does in Egypt. What Maltebrun speaks of a traveller having arrived at Laos from China by descending one of the rivers and crossing a lake, does not prove that the Camboge river has its source in China; this on the contrary accords exactly with the Cochinchinese map; about the 23d or 24th degree of latitude one of the rivers, which flows from the mountains of Ligum-nam, enters the great river of Camboge. This Portuguese traveller must have taken the junction of these two rivers for a lake." (J. A. S. VII. 322).

* M. Klaproth, "à l'époque des travaux champêtres, ils ferment leur maison, cachent leurs bateaux et leur rames, et s'occupent de l'agriculture."

† 僧 The Chinese transcript of the Sanscrit *सङ्ग* *sang*.

the water, when the alligator spontaneously binds himself. They cut up and examine him, whether the body still exist. Whosoever has got dropsy, goes to the *sang*, and entreats a charm to deliver them from it. Hence they generally revere the doctrines of *Fuh*. When the rich die they are buried in graves. Over these erected are towers of Shih (Sákya).

Now, there is a kind of man and woman named *shi lo mán*. They differ not from [other] men, save that their eyes have no pupils. People intermarry with them and have male and female offspring. During the night they transform their spirits into wolves and dogs, and in conformity with the nature of these, proceed to foul places, and feed on excrement. Towards dawn, they return to their soulless bodies. If, in their heavy sleep, you turn their bodies, the spirit cannot return to them. The women conduct business. The men amuse themselves by spurning lime juice on them. Tears flow in abundance from their eyes, and they cannot endure it. * * * * Hence the people erect their dwellings over streams, where there is facility of ablution.

Again, there is a species of men called *kung*. The word *kung* signifies enchanted. Swords or knives cannot wound these. The king employs them as soldiers of his guard. If they violate their duties, they are fitly punished. The *sang* commands their transformation by imprecations, and compels them to abandon their condition of *kung* as a punishment.

In that kingdom, many worship demons. Tradition affirms that when the *Three Precious Ones* arrived in *Tsím lo*,* the inhabitants were very few, and the worship of demons was predominant. These entered upon a strife with the *Three Precious Ones*, that who should overcome, should there abide. In one night each [party] completed a temple and a tower. It was about dawn, and the temple of the *Three Precious Ones* was yet without a roof:† but lo! the tower of the demons was complete. [The *Three Precious Ones*] caused a wind to blow the tower aside, and with his cloth-cap roofed in the temple. To this day that

* Buddhism, according to M. Klaproth was diffused through Siam in A. D. 607, when intercourse first began between that country and China.

† M. Klaproth translates somewhat differently: "Le lendemain celui des Trois Précieux se trouvait entièrement achevé, et le toit convert de tuiles; mais voyant que le tour des démons était également terminé, ils excitèrent un vent," &c. In the original the expression is, 未及 "not completed."

tower stands oblique in the court yard of the temple of the *Three Precious Ones*. The decayed ropes still exist in the roof. Foreign vessels tie a piece of cloth resembling this cap to the mast to make the ship light and quick, and to this they attach sails, in the manner of studding sails, availing thus of the strength of the wind without causing the vessel to lie over.

When the natives are sick they always go to the *Three Precious Ones*, and solieit medicine. If the medicine prove not beneficial, they cast it into the river, and are ordered to bathe. From that time to now the natives and the people of *Tháng* continue to bathe in rivers and besprinkle themselves with water when they are sick. All the natives of the outside sea call the people of *Hán*, *Tháng jin*, because in the time of the *Tháng* [dynasty] intercourse began [with those countries].

When the people die, their bodies are burnt and [the ashes] afterwards buried, to escape divine judgments. Again, one class, seeking tranquillity of mind, make an oath that after their death they will serve as food for birds or of fishes. This tranquillity of mind consists in indifference to the body. The bodies of those who seek tranquillity by birds, are exposed upon rocks among the mountains. The birds fly round about them, and assemble. Then enters a crow with red beak and feet, and gives the first peek. All the crows then descend, and in a moment only the skull and bones remain. They gather and bury these. Such as seek tranquillity by fishes, are burnt to ashes; these are gathered and made into pieces with flour and thrown into the river. Some there are who in this manner feed both the birds and then the fishes.

These people build large ships capable of carrying ten thousand *shí*. They supplicate wood for masts from the great trees in the mountains. They first, with incantations, supplicate in sincerity and faith; and then strike with the ax. If they proceed not thus, fresh blood issues from the tree, and those engaged in the work instantly die. They employ oxen to drag the eart, and on the road play and rejoice. When the charm is addressed advisedly, should the tree not obey, those who should eradicate it and bring it away to their store, are certain to die.

The country produces silver, lead, tin, ocean-cloth,* aloe wood, ivory,

* According to M Klaproth this means Indian cloth. but the author so often

rhinoceros' horns, ebony, sanders wood, camphor, sandal wood, kingfisher's feathers, cow's horns, deer's sinews, ratans, mats, the mats called *kai wan tsih*, rhubarb, fir seed,* nutmeg, swallow's nests, bichu de mar, and sea weed. The money is of silver. The largest is equal to four *chhin*, the middle to one *chhin*; the second to four or five *fan* and the smallest to two *fan* and five *li*. Their name is *fáh*.† The kings smelt and seal the coin. It is unlawful to cut or employ it [in the arts]. They are exchanged for cowries.

In navigating from *He mán* to *Tsim lo* you pass the *Sea of the Seven Isles*. You sight *Wai lo shan*; and further south, *Tai moi chiu* and *A chiu*. You then sight *Kwan lan*,‡ and somewhat to the west *Ta chin yæ*, and *Siao chin yæ*; and thence turning to the northwest is *Pih ka shán*. Thence northerly is *Chuh yæ*, in the mouth of the port of *Tsim lo*; altogether one hundred and eighty-eight *keng*. You ascend this river forty *keng*, making the entire navigation two hundred and twenty-eight *keng*. On the east it is bounded by *Tung po chái*, at a distance of about one hundred and thirteen *keng*. It is so distant because to the southern face of *Tung po chái*, there is an extensive region of mud, formerly on that account called *Lan ni mi*, adjoining the hills *Ta wáng shán* and *Siao wáng shán*. Hence it is necessary to make a long detour.

To the south of *Tsim lo* is *Ché tsi*, *Lo kwan* and *Sung keo*, all belonging to the kingdom *Tsim lo*. Those of *Ta nín*, *Kih lin tán*, *Ting ka nu*, *Phang hang*,§ follow each other successively around the hills. All lie to the westward of *Siao chin æ*, a voyage of probably one hundred and fifty or one hundred and sixty *keng*. They produce lead, tin, kingfisher's feathers, fine mats, swallow's nests, bichu de mar, ratans, camphor, and similar things. But the pepper of *Ting ka nu* is of superior excellence. The natives of that country are all of the *Wu la yu* race.|| They do not comprehend principles and religion. They go applies the term to the cloth of other countries that I take it to mean simply foreign cloth. Morrison says, "any thing that comes from abroad is represented by *yang*" (ocean).

* A seed used in medicine.

† The ticul.

‡ Pulo Condor.

§ There is a town and a river named *Pahang* on our maps, situated to the north of Singapore, which is no doubt the *Phang hang* of our author. *Ting ka nu* is *Tringan*; *Kih lin tán* is *Calantan*; and *Ta nín*, *Patani*.

|| M. Klaproth—"Les habitants de toutes ces contrées sont sans doute de la même race."

about naked, carrying swords. They gird their lower part with a piece of cloth. They chew betel-nut and tobacco. They eat rice steeped in water. They never trade with [foreign] ships.

Next is the kingdom of *Yu fuh*, the hills of which join *Phang hang*, situated at their foot. To go thither, you proceed from *Kwan lœn*, on the magnetic point *mi*, by *Chhá pan** and turn west to *Yu fuh*. It is reckoned a voyage of one hundred and seventy-three *keng* from *Hea man*. The manners of the people are the same as the foregoing, and the productions are also similar, but, compared with these, better and more abundant. Each year three or four merchant vessels may load there. They go to the ships and barter. The country produces gold dust. The people smelt it and make it into small pieces for money, each weighing four or five *fan*. Silver money is not current.

To the west of *Yu fuh* is *Má lá ká*, also belonging to the *Wu la yu* tribe. Their magistrates are called *A' ye*. The king of that country, like the king of *Tsín lo*, employs the people of *Hán* in the administration, and in the management of the treasury. The country produces gold, silver, cloth of the western ocean, rhinoceros' horns, ivory, lead, tin, pepper, sandal wood, sanders wood, swallow's nests, kingfisher's feathers, fine mats, and so forth. Money, both of gold and silver, is current. The sea-going ships of the Central Kingdom never pass beyond this to the *Western Ocean*. They go thus far and stop. It is a voyage of two hundred and sixty *keng* from *Hea mán*. The system of the *Little Western Ocean*,† the *Kingdom of the Black Devils*,‡ and the *Great Western Ocean*§ begins here. The ships of the *Great Western Ocean* frequent these countries, as we shall see in our account of the *Great* and the *Little Western Ocean*.

To the south over-against *Má lá ká* is an island separated by the sea, and named *A thsi*.|| It belongs to the *Red Hairs*, who dwell there. All the ships of the *Red Hairs*, going to the countries of the *Little Western Ocean*, must pass this place to take in rice and water. From *A thsi* the great hills extend towards the south-east to the promontory of

* The island of Singapore ?

† Western Asia, India, &c.

‡ Africa.

§ Europe.

|| Acheen.

Wan ku læ, which is separated from the opposite coast of *Ká lá pá* by the sea. The ships of the *Red Hairs* returning to the *Great Western Ocean*, must pass through this sea: and thence proceed south-west to the *Kap** of the *Black Devils*, and turn westward to the *Great Western Ocean*.

Now to speak of the voyage from the Central Kingdom to *Ká lá pá*;† you must go by *Kwan læn* and *Chhá pan*, guided entirely by the point *wi* of the needle. You go west as far as the hills of *Wan ku læ*‡ and thence to *Ká lá pá*. It is reckoned a voyage of two hundred and eight *keng* from *Hea man*. It originally belonged to the *Wu la yu* country, but now the *Ho lán Red Hairs* possess it. The officers are denominated *Ká pi tán*. Beyond these are the three countries of *Hea kong*, *Wán tán*,§ *Chhi wan*. The first produces pepper. *Wán tán* is a separate country. *Chhi wan* produces pepper and sandal wood. But *Ká lá pá* is the most productive of all these places; hither the ships of all countries come for commerce: here are to be found all the valuable commodities of the Central Kingdom, the *Great Western Ocean*, the *Little Western Ocean*, the *White Heads*, the *Black Devils*, and the *Wu la yu*. The *Ho lan* have a city there, and divide the country. There are many natives of the Central Kingdom settled there for trade and agriculture. Every year they pay a tax of five or six pieces of gold each, and receive a ticket of permission to dwell. The number of the natives of the Central Kingdom is very great; it may be about a hundred thousand. Now the *Ho lan* have prohibited more from settling: they send back such as come in ships.

The island of *Chá pan* is situated to the south of *Kwan læn*, east of the hills *Wan ku læ*. It is on the highway of the navigation of these parts. The inhabitants live by fishing. It produces grass for fine mats of the very best quality. But each year produces enough for only two mats for the palace of the king. These mats are never infested with ants or other insects. They are worth forty or fifty pieces of gold. The second quality are worth twenty to thirty. Those that are worth one or two pieces of gold are still very beautiful and superior to cloth.”

* Cape of Good Hope.

† Java.

‡ Bencoolen.

§ Bantam.

The next chapter is entitled *Siao sí yang kí*, or an Account of the Little Western Ocean. Under this denomination are included India, Persia, Arabia, and the countries north of the Himalaya as far as the sea. The account however is so extremely meagre and uninteresting, consisting of little more than a catalogue of names and a statement of rude distances and bearings, that I will not detain the reader with further details.

The sixth Chapter is entitled *Ta sí yáng kí*, or an account of the Great Western Ocean, by which is understood Europe, and Africa, or the Kingdom of the Black Devils. It is even less interesting than the preceding, and is evidently gleaned from imperfect European materials.

Two short chapters conclude the work: one giving an account of the island called *Kwán læn*, the *Con non*, or *Pulo Condor* of our maps; and the other describing a small island in the China sea named *Nán ó khi*.

MISCELLANEOUS.

*Notes on the Rev. F. MASON's Paper "On the Shells of the Tenasserim Provinces."** By W. H. BENSON, Esq.

(Communicated by Dr. T. Cantor.)

Helix procumbens, Gould. This is *Helix delibrata*, Benson, (*Journal Asiatic Society*, 1836.)

Helix anceps. This shell differs from *Helix serrula*, Benson, in its more depressed spire and flatter apex, its less developed sculpture, comparatively smooth periphery, contabulate whorls, and larger size with the same number of whorls. There is merely a perforation also, instead of an umbilicus. It is quite distinct and a good species, though of the same group as *H. serrula*.

Helix honesta. This shell is at once distinguished from *Nanina vesicula*, Benson, by the angularity of the last whorl, a character not so observable in *N. vesicula*.

Helix saturnia, Gould. This shell is not contained in Pfeiffer's Monograph. The whorls are too few for it to agree with *H. chevalieri*, (Souleyet) and in that particular and in size it agrees better with *H. oxytes*, Benson, which may stray down thus far from the north, as well

* See *Journal of the Asiatic Society*, Vol. p.

as *H. delibrata*. Without fuller characters however, it is impossible to determine.

Helix “*zabata*,” Gould, is clearly a misprint for *H. gabata*.

Helix retrorsa, (not *retorsa*.) Gould, proves to be distinct from *H. interrupta*, Benson, and *H. himalayana*, Lea. The formation of the umbilicus is peculiar.

Under the head of *Streptaxis pectiti*, the name of the author Souleyet is misprinted (“*Souleget*.”)

Cyclostoma pernobile, Gould. Pfeiffer notes this shell as a synonym of *C. aurantiacum*. Schumacher (nec Sowerby), a near ally of *C. perdia*, Sowerby, and places both shells in the Sub-Genus *Cyclophorus*, Montf. Pfeiffer observes: “Ein prächtiges *Cyclostoma*, welches Hr. Dr. Philippi zugleich mit den oben (154) erwähnten von seiner Reise mitgebracht hat, bestätigt vollständig meine früher ausgesprochene Vermuthung, dass *C. pernobile*, Gould, von Tavoy, dieselbe Art sey, welche Chemnitz abgebildet, und Schumacher *Annularia aurantiaca* genannt hat. Jenes ist in Mergui gesammelt worden und entspricht, mit Ausnahme einer etwas dunkleren Färbung, völlig der Beschreibung und Abbildung von Chemnitz, so wie auch der Beschreibung von Gould. Zwar ist der Kiel an dem vorliegenden Exemplar um ein Geringes weniger scharf, als bei der Abbildung von Gould; wir wissen aber wie veränderlich dieser Character gerade bei dieser Gruppe ist, und so dürfte bei der Identität des Vaterlands kein Zweifel mehr über diese ausgezeichnete Art Statt finden, welche zwar von Müller und Chemnitz mit *C. volvulus* zusammengeworfen wird, aber jedenfalls ihre specifische Selbständigkeit zu behaupten im Stande ist.”

Cyclostoma sectilabrum, Gould.—Pfeiffer refers this shell, as well as *C. croceum*, Sowerby, to Guilding’s Sub-Genus *Megalomastoma*. It is quite distinct from *C. croceum* which belongs besides to the Mauritius. Pfeiffer says under the head of *Cyclostoma croceum*: “die von Gould ausgesprochene Vermuthung dass die Art mit seinem *C. sectilabrum* zusammenfallen werde, sich wohl als ungegründet erweisen dürfte, indem die von Gould angegebenen Charaktere by *C. croceum*, Sowerby, durchaus nicht vorhanden sind.”

Bulinus atricallosus, Gould. Reeve has figured this species, but inclines to the opinion that it is a mere variety of *B. citrinus*. Pfeiffer enumerates it among the varieties of *B. perversa*, (*citrinus*,) without

any hesitation. The Pinang variety, with the ordinary aspect of the species, but with a purple chesnut colour on the parietes of the aperture, confirms the opinion.

Clausilia insignis, Gould.—The species sent under this name is very distinct from the species from Malacca, which I have described in MS. as *C. stylus*, and which I find in Mr. Cuming's collection under the name of *C. chinensis* from Java. Possibly this name may be intended for *cochinchinensis*, Philippi, the description of which I have not seen, and which appears to be recognized as distinct by Pfeiffer, from *C. insignis*, Gould. In May 1847, in referring to the Mergui *Clausilia philippiana*, he says: "mit *C. insignis*, Gould, nahe verwandt," a circumstance which, however, I cannot well understand, as *C. philippiana* has only six whorls, and the specimen of *insignis* sent has nine. *Clausilia insignis* differs altogether from *C. stylus* in its smooth sculpture, its greater ventricosity, more blunted apex, the form of the mouth and the number and disposition of the plicæ in the interior.

Vitrina præstans, Gould. Mr. Mason errs in saying that this is the largest species of the Genus. In 1836 I described *V. gigas*, which is $1\frac{3}{20}$ inch in greatest diameter.

Helicarion cassida, Hutton, described in 1838, is one inch two lines in diameter, and an allied Abyssinian species equals it in size.

Achatina octona. The shell alluded to under this name, or that of *octonöides*, is *Achatina erecta*, Benson, of the Chusan series. There is a *Bulimus octonöides*, Adams, belonging to the group to which *B. gracilis*, Hutton, belongs, a shell very nearly allied to *Achatina erecta*.

The small red *Pupa mellita*, Gould, may possibly be *P. bicolor*, Hutton, the animal of which, like many of the Mauritian *Pupæ*, is yellowish and vermilion. *Pupa bicolor* I have taken from Calcutta up to the foot of the Himalaya in Rohilkhund, as well as at Galle in Ceylon, and Dr. Cantor took it at Pulo Pinang.

On a spontaneous combustion of Coal wetted with salt water, on board the ship Sir Howard Douglass, Capt. OGILBY. By HENRY PIDDINGTON, Curator Museum of Economic Geology.

PART I. NARRATIVE.

In a pamphlet printed by me for the Lords Commissioners of H. M. Admiralty in June 1847* and which has been reprinted at home in the Nautical Magazine for 1847, the following passage occurs :—

“When coal reaches the ship it should be carefully examined and it should be noted if wet with fresh or salt water.”

And the note to this says :—

“It is said that a coal-laden vessel was recently burnt at Aden from the Master’s having wetted his coal with the salt water to increase the weight, and I have heard it said that coal wetted with salt water is more dangerous. As a new set of chemical actions would go on between the salt water and the pyrites and copperas this may not be improbable.”

Up to that period this was all, I believe, that was known on this side of the Cape on the subject of the combustion of coal wetted with salt water. But the recent arrival in the port of Calcutta of a ship which had narrowly escaped burning in consequence of her coal heating, after being wetted with salt water, was an event calculated to afford so much information on the subject that I have taken every pains to procure the fullest accounts of it and to investigate the changes which the coal has experienced : I begin by a narrative of the facts.

The ship *Sir Howard Douglass*, Capt. Ogilby, of 715 tons burden, from Newport to Bombay, laden with coal for the Peninsular and Oriental Steam Navigation Company, ran on the 15th of January 1838 into a hurricane of excessive severity, in about Lat. $11\frac{1}{2}^{\circ}$ S. Long. $80\frac{1}{2}^{\circ}$ East, and, being thrown on her beam ends, her cargo shifted, she lost her mizenmast, topmasts, rudder, &c. and was for a time in considerable danger of foundering. She however reached Point de Galle and refitted there as she best could, and proceeded on her voyage towards Bombay

* *A cheap, simple, and certain method of obtaining early warning of any approach to spontaneous combustion, or ignition by accident, on board of steamers, coal or other ships; and of instantly conveying water nearly to the spot, with chemical notes and practical deductions for the use of sailors.*

by the southern route ; but on the 20th of April, being then about on the Equator and in Long. 80° East, twelve days out from Point de Galle, and *ninety-five days after the hurricane*, her log says :—

“At 9 A. M. sent the watch down in the hold to heave up some coal between decks and trim up for the lower hold close up to the beams to ease her from rolling. After digging down from 3 to 4 feet found the coals charred and very hot. Before reaching Galle nothing of the kind was observed, although we had previously trimmed ship by the coals in consequence of hauling the chain cables on deck from aft. When in Galle roads no sign appeared of heat more than we found before, the heat now being so excessive. After a consultation of the officers and crew it was concluded on to make for Ceylon or the nearest port with all dispatch for the preservation of the ship and our lives. At 10 A. M. wore ship to the N. W. ; people employed filling all the small casks with water and taking them on deck, some getting the boats ready in case of being wanted.”

They ran up, having favourable winds, past Ceylon, and arrived safely at Calcutta, where from enquiries made on board I learned,

1. That the coals were smoking when broken out, but the stanchions or lining were not charred. They were also smoking when broken out at Calcutta.

2. She had during the hurricane probably as much as 3 or 4 feet of water in her bilge, which lay for three or four days till the ship was trimmed upright.

3. The greatest heating was for a space of about 55 feet, amidships, between the fore and main hatchways, and at about 10 feet deep. There was but one focus or heated mass, and the coals in the bilge were not heated.

4. The after-hold coals were not heated, and these were shipped dry at Newport, while the fore-hold ones were shipped wet during heavy rainy weather and were the worst.

5. No foul air was noticed at any time in the hold, nor any sulphureous smell, but while retrimming ship after the hurricane, and at Point de Galle, the whole of the hatches had been kept open, so that if any was generated it was dissipated as fast as formed.

6. Capt. Ogilby says he has no doubt that the salt water was the cause of the heating of the coal.

7. During the time of heaving the coals overboard (after the hurricane) and trimming, no heat was perceptible, nor was any found on trimming ship by the coals on the 10th March, the day before her arrival at Point de Galle, and which was 54 days after the hurricane. The coals came from Russell & Co.'s Priscoe Pit at Newport, S. Wales; the ship was a good deal detained for want of coal by a strike amongst the workmen, so that "Mr. Russell," says Capt. Ogilby, "may have got coals from some other pit to help us along unknown to me."

8. The Dock Master at Newport informed Capt. Ogilby that "he had never heard of spontaneous combustion taking place in coals shipped from Newport (or that side of the hill as they call it), although it frequently happens to those taking coal from Cardiff; and not long since a vessel had her decks blown up and was otherwise damaged by an explosion.

9. Capt. Ogilby adds that the ship *Urania*, which he commanded in the Bombay trade, had two narrow escapes previous to his joining her from the coal shipped in Liverpool merely for dunnage taking fire. The first time, as soon as the cargo was out and the coals begun upon, and the second time just as she had got to anchor and broken into the after-hold to get up the passengers' baggage.

PART II.—*Chemical Examination.*

Visiting the ship for the express purpose I could only obtain small fragments, which were said to be part of the damaged coal, the whole of which I was informed was buried in one of the two heaps which the cargo formed when it was landed at the Peninsular and Oriental Company's wharf. The steamers *Haddington* and *Precursor* coaled from these heaps, but their officers failed to find any damaged coal amongst the heaps, and this, although in the case of the *Haddington*, I had written to a highly intelligent officer on board to be on the look out for it. Hence it would seem that as far as external appearances went, there was not in the main body of the heated part any very great change. Still as we know that considerable heating might go on (as in the case of emitted gases) without much alteration in mere appearance, I have subjected what I could obtain to careful examination, of which I now state the results.

The pure undamaged coal.

This is a very bright glance, and indeed a highly specular coal on the

cross fracture, and in the sunshine, after a shower of rain, it is perfectly radiant with the bright places, which have often a pavonine lustre, and the abundant laminæ of pyrites which are all disposed like them vertically to the horizontal planes. On the horizontal places of the blocks, which are something less than six inches thick, the lustre is a dark velvet black and few or no traces of the pyrites are seen except in minute veins, often forming rhomboids which mark the intersecting edges of some of the larger laminæ. In a few instances the vertical plates of pyrites are replaced by plates of calc spar.

Its specific gravity is 1.290

Its analysis gives per cent.

Hygrometric water,	2.25
Gaseous and Bituminous matter,	24.50
Iron and a little silex and lime,.....	4.75
Carbon,	69.00
	<hr/>
	100.50

The excess is from the peroxidation of the iron.

What was given to me as the damaged coal on board the *Sir Howard Douglas* was evidently nothing more than the *top coal*, or coal shales at the top and bottom of the seam, and upon examination this proved to be the case, for it contained 38 per cent. of ash, its constituents per cent. being,

Hygrometric water,	1.65
Gaseous and Bituminous matter,	14.17
Ash ; Iron, silex and lime,.....	37.82
Saline matter, principally sulphate of iron, from decomposed pyrites,	4.35
Carbon,	44.18
	<hr/>
	102.17

Excess as before from the peroxidation of the iron.

This result is only so far useful as that it shews that considerable heating may go on without much, if any, apparent change in the structure and appearance of the coal, and that this may take place after so long an interval as *ninety-five* days! after being damaged by salt water, and I have therefore thought it highly worthy of being placed upon record.

A supplementary note on Captain SHERWILL'S Meteoric Iron. By
HENRY PIDDINGTON.

In my remarks on the remarkable form of this meteorite, I have suggested, p. 545, Journal Nov. 1848, that it might perhaps be owing to its having fallen in a semifluid state as a mass of melted metal, diagonally, on a yielding soil, and that the *foot* might be thus formed. By a singular piece of good fortune, which rarely indeed occurs to theorizers, I am enabled very greatly to add to the probability that this was really the case, by the following parallel instance, in which nature has certainly performed for us the very experiment which I suggested, of projecting a semifused mass of metal on a soft surface.

In a rich collection of volcanic rocks and minerals from Vesuvius,* presented by T. B. Swinhoe, Esq., there are two of the well known *Bombe Volcaniche* (volcanic bombs) one of which is a flattened elliptical disk about $3\frac{3}{4}$ inches long by 3 inches wide, and 1 inch thick, as in the annexed sketch, of which one is the horizontal section and the other a vertical one.

It will be seen that this may be termed a complete embryo of our Acrolite, though its substance is a common leucitic or pearlstone porphyry, or cineritious lava. It has on what must (from the position of the centre of gravity) have been the lower part, the rudiments of a foot, of which, as in the meteorite, the axis is about in one of the two centres of the ellipse, and it evidently, from the smoothness of the surface, on which are incrustated grains of hornblende or augite, which are not seen internally, has been in a state of fusion. Now these bodies, we know, must fall vertically, but if they fell on a slope, which this probably did, and in a soft soil of ashes or *rapilli*, they would be driven forward some distance in a soft state while cooling, as I have supposed our meteoric iron to have been.

Our volcanic bomb is cracked through the longer axis of the ellipse, and, at the prominence which may represent the foot, it has, as it were, burst open, as if some gases had suddenly escaped there. The ends are a little fractured, making the foremost one rather truncated, and I

* But of which I regret to say all the labels are lost!

was obliged to break a small chip off to get a fresh fracture, so as to be certain of the internal structure.

In collections better furnished than ours it may be hoped that better specimens to elucidate this curious question may be found.

Earthquakes in Assam. Communicated by Major JENKINS, Agent to the Governor General.

January 22nd, 1849.—Yesterday morning about a quarter past 8, we felt so severe a shock of an earthquake at Gowhatti, that it may be worth recording. After a very long interval, during which we have been entirely free from earthquakes, or only had a few slight tremblings, this occurred during a very thick fog which lasted until 11 o'clock; the weather for some time before had been cold and cloudy with N. E. winds, and on the 18th we had rain with a strong N. E. wind nearly all day. Some days before there had been heavy falls of snow on the second ranges of Bootan mountains, more I think than ever I recollect seeing in this neighbourhood.

When this earthquake occurred I was in my pinnace, preparing for embarkation, and the boat shook so violently that I thought some one was jumping on the gang-board, and when I went up to my house I found some of the ceiling of one room and the cornices of others had been much shaken. All who were in houses at the time describe the shock as one of the severest we ever had, and the rumbling as extraordinary loud.

Jagee, Assam, January 26th.—Your note of the 23rd has just reached me, noticing a violent earthquake at Gowhatty on the 22d, at about 8½ A. M. On the same day and about the same time I was at Ruha in a Naumghur, when we felt a very severe earthquake; it lasted at least a minute, and the ground moved greatly, the trees also shook violently. It was also I hear felt at Nowgong, but I have not heard that any buildings were damaged. On the 23rd, at 9 P. M. I felt another strong shock of an earthquake at Jagee; at the same place on the 26th, at about 5 A. M., just as I was getting up (it was not light) I heard a rumbling noise like the movement of heavy guns, and the earth moved but not so violently as on the 22nd and 23rd, or so long. On the 17th, I

marched to Jumoona-mookh ; the day was sultry and close, the next day, 18th, I set out to return to Ruha about 8 A. M., the weather still gloomy and close ; at 10 A. M. the rain came down heavily and continued without intermission all day and a greater part of the night ; the 19th was cloudy, the 20th cloudy and rain for some hours. 21st, the same kind of gloomy weather and a drizzling rain and a heavy oppressive atmosphere, so much so that I fully expected the approach of an earthquake, as my experience in Assam is that I have invariably observed we are sure to have earthquakes when the weather is gloomy and the atmosphere dense, not a breath of air stirring or thing moving ; on the 22nd, the weather was still close ; on the 23rd during the day the sun came out but was occasionally obscured, and the atmosphere was heavy, and I felt oppressed whilst marching on the morning of the 22nd, and the evening of the 23rd ; not a breath of air was stirring. On many occasions I have observed this remarkable circumstance—a dead calm, a stagnation of the atmosphere, and a perfect stillness is sure to prevail before the occurrence of an earthquake, if not at the time. On the 24th, the weather still continued close and gloomy, heavy rain fell on Wednesday night ; the 24th, 25th, the morning was cloudy and the sun did not come out till the afternoon ; weather close and sultry. 26th, as I before observed, I felt another slight shock of an earthquake about 5 A. M., it was not severe, nor did it last so long as the others, but was accompanied with a rumbling noise, which the others were not. The shocks seem to come from the south-east, and to proceed northerly or rather north-west. I have been thus minute regarding these earthquakes that you may compare your own observations with my notes.

(Signed) J. BUTLER.

Earthquakes experienced in Assam in the latter end of January, 1849.

Capt. Dalton, Gowhatty.—We experienced here on the morning of the 26th, two shocks of an earthquake, which were very remarkable, not so much for the violence of the shocks—for that was nothing to signify—but for the loud noise that preceded, accompanied and was heard some seconds after the trembling had ceased. There could be no mistake as to whence the noise proceeded ; I heard it distinctly two or

three seconds, before there was any sensation of a shock, gradually approaching and for some seconds after it had passed, and it distinctly notified the direction of perturbation and gave me a vivid idea of the rapidity with which it moved.

Mr. C. K. Hodgson, Burpetah.—I have the pleasure to send you some notes about the late earthquakes; the weather has been very changeable since the 15th, with rain occasionally, but I have observed that these earthquakes generally take place after a heavy fall of rain in the hills. They appear to come this year from the Himalayas, and not as in 1845, from the Cossya hills. The first one on Monday last (the 22nd) was rather severe, and caused a few cracks in the walls of my new house, but I am thankful that the injury was not worse.

Memorandum on earthquakes in January, 1849, at Burpetah, Assam.

There was an earthquake felt at 8 A. M. on the 22nd January; it commenced with only a gentle undulation of the ground for about a minute, accompanied by the usual rumbling noise; the noise gradually became louder and was followed by a smart shock; apparently from the north, and then a second more severe one, which made the timbers of the house crack and rattled the doors and windows fearfully. The whole lasted for about a minute and half. The morning was very foggy and cold, with a sharp north-east wind, and the Thermometer in the shade down to 54°, or 6 degrees lower than it was on the previous morning, and the fog did not clear up until near noon.*

There was another smart shock of earthquake at a quarter past 11, P. M. on the night of the 23rd, which also appeared to come from the north. And we had 2 more slight shocks about 6 A. M. on the morning of the 26th.

The following is an extract from my diary of the weather from the 17th to the 27th January, 1849:—

* The weather as here described agrees perfectly with the weather at Gowhatty on the same morning. We had the same heavy rain on the 18th also.

Days of the month.	Thermometer in the shade.			Rain gauge elevation 5 feet.	Direction of the wind.	Remarks on the weather.
	Sunrise.	Noon.	Sunset.			
1849.	°	°	°			
January 17th,	56	66	68	„	N. East (strong).	Cloudy weather ; strong N. East wind in the forenoon ; Light N. East wind in the afternoon.
„ 18th,	61	62	60	0.600	North (strong).	Rain all day, with strong N. wind ; a storm from the N. between 4 P. M. and Sun-set.
„ 19th,	58	66	67	0.450	N. East (strong).	Clear strong N. East wind. Light rain after 9 P. M. which continued nearly all night.
„ 20th,	62	65	68	„	N. East (Light).	Light clouds and light N. East wind.
„ 21st,	60	64	65	„	Do. (Do.)	Heavy clouds in the forenoon. Afternoon clear. Light N. East wind.
„ 22nd,	54	65	67	„	Do. (Do.)	Very foggy from sunrise until noon. 3 distinct shocks of Earthquake from the N. about 8 A. M. ; afternoon clear with light N. East wind.
„ 23rd,	58	64	68	„	Do. (Do.)	Foggy for 2 hours after Sunrise ; clear afterwards until sunset, when it became cloudy again. A smart shock of Earthquake at a quarter past 11 P. M. apparently from the North.
„ 24th,	60	66	66	0.050	Do. (Do.)	Light clouds in the morning, a slight shower of rain in the afternoon. Light rain again at night.
„ 25th,	60	65	67	„	Do. (Do.)	Light clouds in the morning. Clear afternoon.
„ 26th,	60	65	67	„	Do. (Do.)	2 Slight shocks of Earthquake from the North at 20 minutes to 6 A. M., cloudy all day.
„ 27th,	62	67	68	„	Do. (Do.)	Clear morning with light N. East wind in the forenoon. Westerly wind in the afternoon and cloudy weather after sunset.

Addendum on the Battle field of Alexander and Porus, by Capt. JAMES ABBOTT.

Since the despatch of my remarks upon the battle field of Alexander and Porus, I have by cross-examining persons acquainted with the mountain Mahabunn, discovered that the ruined fort which I supposed to be Aornos, upon the crest of that mountain, is called Balimah : and that there is another ruined fort further north upon the same crest, called at present Shah kote, or the king's castle. As this Balimah is immediately above Umm, we have here beyond a doubt the Umb Balimah to which Alexander moved his camp for the attack of Aornos : for it is scarcely possible that there should be a second union of two names which are so uncommon. Umb is on the western bank of the Indus, overshadowed by the Mahabunn and Balimah. And a camp at Umb (the highest point upon the Indus to which a camp can ascend), could be useful only for the assault of a fortress upon the Mahabunn. It seems therefore probable either that Shah kote is the Aornos of history, or that Aornos is merely a corruption of Awur (a fort) as supposed by Professor Wilson : and that it has been used in preference to the name Balimah, to distinguish it from the Umb Balimah where the camp was established. Immediately below Shah kote, the mountain having been cleft by the Indus, forms a natural wall of about 4 or 5,000 feet altitude, and as the attack seems to have been made from the river side, where Mahabunn has far more the character of a rock than of a mountain, it is easy to account for the appellation of rock given it by the Greeks to describe its extreme abruptness. It is common in this country to amalgamate together, for the sake of distinction, the names of two proximate villages or places. But as this Balimah is in the clouds, and Umb is in the river basin, it seems probable that in Alexander's day both belonged to the same chief, which is no longer the case : Balimah appertaining to the Suddoons, a race of Pathans, and Umb to Jehandad Khan son of the celebrated Poyndah Khan who so long held the Sikhs at bay. Umb is the capital of that chief. Immediately opposite and across the Indus the valley of that river is closed by projecting rocks called Durbund, and possibly so named by Alexander or his successors, after a similar process upon the coast of the Caspian. Durbund is the only locality in this neighbourhood connected by tradition with

the memory of Alexander, although the capital of Huzara (Sikundur-poor) still bears his name. So little is known of the Mahabunn by persons living on this side the river, that all my enquiries for Balimah had proved futile until just now, when a visit from Jehandad Khan has given me the clue.

Errata in Capt. Abbott's former article.

For elephants page 5, line 8, read elements.

Pubral p. 8, l. 21, ,, Pukrul.

burst p. 10, l. 19, ,, brast.

are p. 11, l. 25, ,, on.

first p. 12, l. 13, ,, just.

poems p. 15, l. 11, ,, Pœans.

part p. 16, l. 11, ,, post.

List of the Rajahs of Sialkote, by the same.

Although the following list of princes who have reigned over the ancient Raj of Sialkote in the Punjaub, is manifestly erroneous in the duration assigned to each reign, yet as it probably is all that is known of the dynasty, and as I live in hourly apprehension of losing all that remain of my papers, it seems to me that you may deem it worthy of preservation in the pages of the Asiatic Society's Journal. It is extracted from the fragment of an old Persian book which I procured at Sialkote, and of which the title page was lost.

From Raja Bruhm to Raja Saul Bahn, 2000 years.

1. Rajah S. ascended the throne Anno 137 of Vikramajeet.
2. Rajah S. to R. Russaloo his son, 90
3. ,, Hôdi, 45
4. ,, Burjial, 52
5. ,, Jypaul, his son, 62
6. ,, Munnipaul, ditto 72
7. ,, Mookundurpaul, ditto 62
8. ,, Biddeypaul, ditto 57
9. ,, Kishenpaul, ditto 38
10. ,, Bynepaul, ditto 59
11. ,, Kusspaul, ditto 92
12. ,, Runjeetpaul, ditto 62
13. ,, Runbeerpaul, ditto 88

14.	„	Dunpaul,	his son,	34 years.
15.	„	Urjoonpaul,	ditto	53
16.	„	Luchmipaul,	ditto	49
17.	„	Goorditpaul,	ditto	79
18.	„	Diapaul,	ditto	46
19.	„	Soorutpaul,	ditto	63
20.	„	Sunnunpaul,	ditto	48

Here ends the Rajpootee Dynasty.

Total 1151

Or $57\frac{1}{2}$ years per reign.

Furokhmah,	35 years.
Maimood Ghuznuvi,	9
Shahb-ooddeen,	40
Bullól Shah,	61
Sooltan Lodi,	49
Syud Jullal, ..	23
Khyrooddeen Ghori,	32
Mir Timoor,	5
Nadir Shah,	$4\frac{1}{2}$
Koomaioon,	20
Ukhbur,	51
Noor-ooddeen,	24
Shah Jehan,	31
Aurungzebe,	54
Bahadoor Shah,	4
Ferokh Sér,	7
Jehandari Shah,	1
Ruffyut Durgah,	3 months.
Dowlut,	3 ditto.
Muhummud Shah,	30
Ahmed Shah,	3
Ali Gohr,	
Ukhbur Shah,	

PROCEEDINGS
OF THE
ASIATIC SOCIETY OF BENGAL
FOR FEBRUARY, 1849.

At a meeting of the Asiatic Society of Bengal, held on the 6th February, 1849,

J. W. LAIDLAY, Esq. V. P. in the chair.

The proceedings of the January meeting were read and the accounts and vouchers for January submitted.

Capt. Bazeley, B. A., was proposed as a candidate for election at the March meeting, by Dr. O'Shaughnessy, seconded by Lieut. Staples.

W. J. H. Money, Esq. C. S. proposed by Mr. Welby Jackson, seconded by Mr. Colvin.

Read letters—

From W. Seton Karr, Esq. Under Secretary to the Government of Bengal, presenting for the use of the Museum of Economic Geology, a Map of Behar in 35 sections, and map of Shahabad in 16 sections. The maps were exhibited.

From Capt. Newbold, forwarding a note by Hekekyan Bey, Honorary Member of the Asiatic Society, on the strata cut through in excavating for coal in Wade Sherai.

From Capt. J. D. Cunningham, forwarding two inscriptions from the Jain temple at Muksee.

From Dr. Weber, Berlin, forwarding two sheets of his edition of the Vayasaneya Yajur, and recommending the Society to undertake an edition of the black Yajur.

From Dr. Roer, containing sundry propositions on the same subject. Referred to the Oriental Section.

From A. H. Blechynden, Esq. forwarding a stone inscription taken from a Mosque in Jessore.

Dr. O'Shaughnessy having published in a separate form a map of the country in the neighbourhood of the supposed site of the battle between Alexander and Porus, shewing also the position of the British army under Lord Gough, the expense of the same was sanctioned by a vote of the meeting.

Some discussion having ensued regarding the risk incurred by the Society in lending MSS. to members at a distance, it was proposed by Rev. Mr. Long, and seconded by Capt. Latter, that Mr. Elliott be requested to return without delay the vols. of the Mackenzie MSS. now three years in his possession.

Read a letter from Mr. Gutzlaff, enquiring for a Grammar and Dictionary of the Tibetan language.

On the motion of Welby Jackson, Esq. it was unanimously resolved that a copy of Csoma de Koros's Tibetan Grammar and Dictionary be presented in the name of the Society to Mr. Gutzlaff.

With reference to several small collections of botanical specimens in the Society's possession, it was resolved, on the motion of Mr. Welby Jackson, that these be sent in the name of the Society to the Superintendent of the Botanical Garden.

J. W. LAIDLAY,
Vice-President.

LIBRARY.

The following books have been received since the last meeting :—

Presented.

Epistola Critica Nasifi Al-Jazigi Berytensis ad de Sacyum versione Latina et adnotationibus illustravit indicemque addidit A. F. Mehren. Lupsiae 1848, 8vo.—PRESENTED BY THE GERMAN ORIENTAL SOCIETY.

Zeitschrift der Deutschen morgenlandischen Gesellschaft herausgegeben von den Geschäfts fuhrern. Zweiter Band III. heft.—BY THE EDITOR.

The Calcutta Christian Observer, No. 110.—BY THE EDITORS.

The Journal of the Royal Asiatic Society of Great Britain and Ireland. No. XVIII.—BY THE SOCIETY.

The Journal of the Indian Archipelago, Vol. II. No. XII. (2 copies).—BY THE GOVERNMENT OF BENGAL.

The Oriental Baptist, No. 26.—BY THE EDITOR.

Upadeshak, No. 26.—BY THE EDITOR.

Tatwabodhini Patrika, No. 66.—BY THE TATWABODHINI SABHA.

Meteorological Register kept at the Surveyor General's Office, Calcutta, for the month of December, 1848.—BY THE DEPUTY SURVEYOR GENERAL.

The Quarterly Journal of the Geological Society, No. 15.—BY THE SOCIETY.

Map of the district of Shahabad, (16 sheets).—BY THE GOVERNMENT OF BENGAL.

Map of the district of Behar, surveyed by Capt. H. V. Stephen, 19th Regt. N. I. and Lieut. W. S. Sherwill, 66th Regt. N. I. in seasons 1841-2-3-4.—BY THE GOVERNMENT OF BENGAL.

The Transactions of the Royal Irish Academy, Vol. XVI. part 2.—BY THE ACADEMY.

Exchanged.

The London, Edinburgh and Dublin Philosophical Magazine, No. 220.

Purchased.

The Calcutta Review, No. XX.

The Bhagavat Gita, or Dialogues of Krishna and Arjoona, in eighteen lectures in Sanskrita, Canarese, and English. Edited by Rev. J. Garrett, Bangalore, 1846, 4to.

The North British Review, No. XIX.

Journal des Savants for September, 1848.

The Annals and Magazine of Natural History, No. 11.

Contes Rendus, Hebdomedaires des Seances de l'Academie des Sciences, Nos. 12—17.

Report of the Curator Museum Economic Geology for the months of January and February.

Geological and Mineralogical.—I have received from Major Jenkins, Agent to the Governor General in Assam, some notes of earthquakes in that district, which I have put into a separate form for the Miscellaneous notices of the Journal, as all these phenomena should be carefully registered.

Mr. T. B. Swinhoe has presented us with a box containing a large and very valuable collection of rocks and minerals from Vesuvius, being upwards of 250 specimens, but unfortunately every label belonging to them has disappeared, so that we have not the advantage of knowing their localities and the dates of the eruptions! Nevertheless they will supply us with many fine specimens, and with the series and remnants of collections we already have, and which I have carefully collected, we shall be able to make up a fine series of volcanic rocks and minerals.

I have had the good fortune to discover in this collection a specimen of a volcanic bomb which I think strongly, if not completely confirms my theory of

the manner in which the puzzling *foot-like* appendage to our mass of meteoric iron and to other acrolites may have been formed. I have put the details of this into the form of a supplementary note for the Journal, with a sketch.

From Mr. W. H. Sweedland we have received a miscellaneous collection of rocks from Palamow and the stations on the Ganges.

To Col. Low of Penang, we are indebted for two fine specimens of a shell conglomerate, with one of a dark grey limestone and clay slate, but I have not got any notice of the locality.

Economic Geology.—With Mr. Swinhoe's collection of Vesuvian minerals already mentioned we have also to acknowledge from that gentleman a specimen of yellow enamelled plaster, and a fragment of brick, both from the walls of Herculaneum, as also an ancient earthen lamp from the same place.

I have obtained a splinter of the fine red Aberdeen granite of which the pedestal to Lord Auckland's statue is made, and which was broken off one of the inner basement stones on board the Marlborough.

Lt. Haughten, B. N. I. has presented a very fine little crystallised diamond from Sumbhulpore, with several specimens of rocks, containing minute portions of copper from Chota Nagpore, but nothing worth attention farther than as an indication that there may be veins.

I have put into the form of a paper for the Journal my examination of some coal from the ship Sir Howard Douglass, which was on the point of igniting 95 days after it had been wetted with salt water in consequence of the ship, which was coal laden and bound to Bombay, having been thrown on her beam ends in a hurricane, during which time the cargo shifted, and I have added specimens of the coal, which is of a remarkably pyritous kind from the Priso Pit near Newport in South Wales, to the collection of the Museum.

Meteorological Register kept at the Surveyor General's Office, Calcutta, for the Month of Feb., 1849.

Lat. $22^{\circ} 33' 28''$, 33 N. Long. $88^{\circ} 23' 42''$, 84 East. Mag. Variation $2^{\circ} 28' 36''$ East. Mag. Dip. $27^{\circ} 45'$.

Days of the Month.	Observations made at sunrise.						Maximum Pressure observed at 9h. 50m.						Observations made at apparent noon.						Observations made at 2h. 40m. p. m.						Minimum Pressure observed at 4 p. m.						Observations made at sunset.						Maximum and Minimum Thermometers.				Rain Gauges.	
	Temperature.			Wind.			Temperature.			Wind.			Temperature.			Wind.			Temperature.			Wind.			Temperature.			Wind.			Maximum.		Minimum.		Elevations.							
	Barometer reduced to 32° Fahrenheit.	Of the Mercury.	Of the Air.	Of Wet Bulb.	Direction at sunrise.	Aspect of the Sky.	Barometer reduced to 32° Fahrenheit.	Of the Mercury.	Of the Air.	Of Wet Bulb.	Direction at 9h. 50m.	Aspect of the Sky.	Barometer reduced to 32° Fahrenheit.	Of the Mercury.	Of the Air.	Of Wet Bulb.	Direction at 2h. 40m. p. m.	Aspect of the Sky.	Barometer reduced to 32° Fahrenheit.	Of the Mercury.	Of the Air.	Of Wet Bulb.	Direction at 4 p. m.	Aspect of the Sky.	Barometer reduced to 32° Fahrenheit.	Of the Mercury.	Of the Air.	Of Wet Bulb.	Direction at sunset.	Aspect of the Sky.	Maximum.	Mean.	Minimum.	Maximum.	Feet.							
																																			Upper.	Lower.						
1	30.045	54.7	59.3	57.3	Calm.	Clear.	30.103	78.4	77.5	65.8	N. E.	Clear.	30.036	80.7	89.4	66.5	N.	Clear.	30.017	80.7	128.8	61.2	N. N. W.	Clear.	30.035	16.3	11.4	61.3	N. N. W.	Clear.	82.4	10.7	52.0	105.0	..	..				
2	30.048	60.0	60.9	59.0	Ditto	Cirro cumuli.	30.104	73.2	63.2	67.0	S. E.	Ditto	29.973	81.2	128	67.8	N. W. S. W.	Cirro cumuli.	29.960	80.9	100.0	68.3	S. W.	Cirro cumuli.	30.036	77.3	16.0	69.5	W	Cirro cumuli.	83.0	71.8	60.5	103.8	0.16	..						
3	30.042	68.2	67.9	67.2	Ditto	Cloudy.	30.108	73.2	62.4	67.0	N. E.	Cloudy.	30.032	73.2	128	61.2	N. N. W.	Cloudy.	30.055	69.3	109.4	64.2	N. N. W.	Cloudy.	30.055	69.3	109.4	64.2	N. N. W.	Cloudy.	84.0	73.0	68.8	104.0	..	..				
4	30.063	61.0	61.0	60.4	N.	Cirro cumuli.	30.108	70.2	60.8	64.8	S. E.	Cirro cumuli.	30.015	80.5	129.0	60.0	S. W.	Cirro cumuli.	30.011	81.0	100.2	70.2	N. W.	Cumuli.	30.015	77.9	12.4	69.8	N. N. W.	Cirro cumuli.	83.0	71.6	61.0	102.2	1.20	1.28						
5	30.053	62.0	63.9	62.0	N. E.	Cloudy.	30.093	67.0	67.0	65.0	W.	Dreazy.	30.118	65.0	65.3	63.3	N. E.	Cloudy.	30.081	12.8	130.0	61.5	N.	Ditto	30.081	12.8	130.0	61.5	N.	Ditto	15.6	69.3	69.0	105.7	..	..				
6	30.069	61.8	61.7	61.7	N. N. E.	Cirro cumuli.	30.100	70.4	10.6	67.0	N.	Cirro cumuli.	30.089	76.3	74.4	67.7	N.	Cirro cumuli.	30.071	76.3	16.1	68.9	N. N. W.	Cloudy.	30.071	76.3	16.1	68.9	N. N. W.	Cloudy.	17.0	69.4	61.0	107.0	..	..				
7	30.061	61.7	61.7	61.7	Clear.	Cloudy.	30.135	72.2	72.2	65.7	N. N. E.	Clear.	30.101	74.0	18.3	65.0	N. W.	Clear.	30.080	74.0	15.3	69.3	W.	Clear.	30.080	74.0	15.3	69.3	W.	Clear.	79.6	70.2	61.8	101.0	..	7						
8	30.071	58.0	58.0	58.0	Ditto	Clear.	30.135	70.2	71.8	63.0	S.	Ditto	30.082	76.0	16.7	61.0	W.	Clear.	30.072	78.1	17.9	60.3	W.	Clear.	30.072	78.1	17.9	60.3	W.	Clear.	80.0	69.3	58.8	101.2	..	8						
9	30.031	56.8	56.9	55.5	Ditto	Ditto	30.114	70.3	71.2	61.4	S.	Ditto	30.069	14.0	71.0	61.9	S. W.	Ditto	29.983	89.1	18.7	62.2	N. W.	Ditto	30.069	74.0	13.1	63.0	S. E.	Ditto	81.5	69.5	57.4	105.0	..	9						
10	30.031	56.8	56.9	55.5	Ditto	Ditto	30.114	70.3	71.2	61.4	S.	Ditto	30.069	14.0	71.0	61.9	S. W.	Ditto	29.983	89.1	18.7	62.2	N. W.	Ditto	30.069	74.0	13.1	63.0	S. E.	Ditto	81.5	69.5	57.4	105.0	..	10						
11	30.031	56.8	56.9	55.5	Ditto	Ditto	30.114	70.3	71.2	61.4	S.	Ditto	30.069	14.0	71.0	61.9	S. W.	Ditto	29.983	89.1	18.7	62.2	N. W.	Ditto	30.069	74.0	13.1	63.0	S. E.	Ditto	81.5	69.5	57.4	105.0	..	11						
12	29.916	60.2	60.4	58.8	N. N. E.	Clear.	30.027	71.0	70.9	65.0	N. W.	Clear.	29.980	77.6	76.0	65.0	N. W.	Clear.	29.955	79.8	16.8	64.5	N. W.	Cumuli.	29.955	79.8	16.8	64.5	N. W.	Cumuli.	80.8	10.6	60.3	104.2	..	12						
13	29.958	61.0	61.2	58.6	E.	Ditto	30.044	73.9	73.9	65.5	S. E.	Ditto	30.013	79.8	19.1	68.7	S. S. E.	Cumuli.	29.981	82.0	80.4	67.8	S. S. E.	Cumuli strat.	29.981	82.0	80.4	67.8	S. S. E.	Cumuli strat.	82.8	12.0	61.2	98.5	..	13						
14	29.940	60.3	60.4	60.0	N. W.	Cloudy.	30.094	73.9	70.3	70.3	N. W.	Cumuli.	30.041	85.2	82.2	72.2	N. W.	Ditto	29.991	83.0	81.3	70.5	N. W.	Ditto	29.991	83.0	81.3	70.5	N. W.	Ditto	84.0	16.4	68.8	106.7	..	14						
15	29.974	63.0	63.5	62.0	N.	Clear.	30.044	70.7	71.3	67.3	N. W.	Clear.	29.986	80.7	79.6	67.7	E.	Clear.	29.986	80.7	82.0	66.2	W.	Cirro strat.	29.986	80.7	82.0	66.2	W.	Cirro strat.	84.4	13.9	63.3	108.8	..	15						
16	29.984	64.0	64.2	63.4	E.	Ditto	30.038	75.4	76.5	72.6	S.	Cumuli strat.	29.992	82.7	81.9	71.7	S.	Cumuli.	29.992	82.7	81.9	69.0	N. W.	Cumuli strat.	29.992	82.7	81.9	69.0	N. W.	Cumuli strat.	85.3	74.8	64.5	108.4	0.02	0.16						
17	29.969	63.3	63.3	61.3	S. E.	Cumuli strat.	29.925	71.4	70.8	65.9	N. E.	Ditto	30.012	77.0	75.5	67.7	E. N. E.	Ditto	29.961	81.3	80.0	70.4	S. F.	Ditto	29.961	81.3	80.0	70.4	S. F.	Ditto	82.5	13.2	63.8	105.7	..	17						
18	29.983	63.6	63.9	63.8	S. S. E.	Clear.	29.925	71.4	70.8	65.9	N. E.	Ditto	29.961	81.3	80.0	70.4	S. F.	Ditto	29.961	81.3	80.0	70.4	S. F.	Ditto	29.961	81.3	80.0	70.4	S. F.	Ditto	82.5	13.2	63.8	105.7	..	18						
19	29.901	63.0	63.0	61.2	S. sharp.	Cloudy.	29.925	71.4	70.8	65.9	N. E.	Ditto	29.961	81.3	80.0	70.4	S. F.	Ditto	29.961	81.3	80.0	70.4	S. F.	Ditto	29.961	81.3	80.0	70.4	S. F.	Ditto	82.5	13.2	63.8	105.7	..	19						
20	29.908	63.6	63.6	63.7	N. Foggy.	Cloudy.	29.925	71.4	70.8	65.9	N. E.	Ditto	29.961	81.3	80.0	70.4	S. F.	Ditto	29.961	81.3	80.0	70.4	S. F.	Ditto	29.961	81.3	80.0	70.4	S. F.	Ditto	82.5	13.2	63.8	105.7	..	20						
21				
22					
23	29.788	71.4	71.5	70.8	N. S. L.	Clear.	30.100	79.6	79.4	74.4	S. S. W.	Cumuli strat.	30.016	85.8	85.5	75.2	S. S. W.	Cumuli.	29.977	87.8	81.3	16.7	S. W.	Clear.	29.977	87.8	81.3	16.7	S. W.	Clear.	88.8	80.1	71.4	101.0	..	23						
24	29.812	72.9	73.5	71.7	S. W.	Cloudy.	30.101	81.7	82.0	75.1	S. sharp.	Cumuli.	30.031	83.5	83.5	77.0	S. sharp.	Cumuli strat.	29.978	86.8	86.6	79.8	S. W.	Clear.	29.978	86.8	86.6	79.8	S. W.	Clear.	86.1	80.0	73.2	98.5	..	24						
25	29.835	73.6	73.7	72.8	S. W.	Clear.	30.041	81.7	82.0	75.1	S. sharp.	Cumuli.	30.031	83.5	83.5	77.0	S. sharp.	Cumuli strat.	29.978	86.8	86.6	79.8	S. W.	Clear.	29.978	86.8	86.6	79.8	S. W.	Clear.	86.1	80.0	73.2	98.5	..	25						
26	29.833	70.0	69.2	61.3	N. N. W.	Ditto	30.019	78.3	77.9	60.8	N.	Clear.	30.024	83.3	82.3	61.4	N.	Clear.	29.974	83.7	84.3	68.9	S. W.	Cirro cumuli.	29.974	83.7	84.3	68.9	S. W.	Cirro cumuli.	86.2	72.9	69.4	103.8	..	26						
27	29.842	63.8	64.6	61.8	N.	Ditto	30.019	78.3	77.9	60.8	N.	Clear.	30.024	83.3	82.3	61.4	N.	Clear.	29.974	83.7	84.3	68.9	S. W.	Cirro cumuli.	29.974	83.7	84.3	68.9	S. W.	Cirro cumuli.	86.2	72.9	69.4	103.8	..	27						
28	29.988	64.0	61.8	61.5	N. W.	Ditto	30.050	77.3	77.7	64.9	E.	Ditto	30.009	84.8	83.2	62.7	W. S. W.	Ditto	29.947	86.0	85.0	62.7	W. N. W.	Ditto	29.947	86.0	85.0	62.7	W. N. W.	Ditto	86.7	73.9	65.0	104.8	..	28						
Mean	29.951	64.6	64.9	63.2	..	..	30.021	73.7	74.0	61.2	..	..	29.975	80.1	79.1	67.7	..	..	29.901	82.5	81.6	68.2	..	..	29.980	82.6	81.2	71.7	..	..	83.5	74.1	64.6	102.9	1.45	1.07
Mean of the preceding month of last year.	29.995	65.0	65.3	63.0	..	..	30.051	74.7	75.2	66.5	..	..	30.008	82.3	81.9	68.0	..	..	29.923	85.7	85.2	68.7	..	..	29.997	85.8	84.6	67.8	..	..	86.9	..	..	..	..	..	

These Observations have been made for the most part, with a supply of new and first rate Instruments received into the Observatory, by orders of the Bengal Government, a brief description of the Instruments seems necessary.

1st.—The Barometer is a standard Instrument by Newman, diameter of the tube 0.500 inches. The following is the comparative showing of this Instrument and those

2nd.—The Thermometer is a Standard Instrument by Newhnan, on metal Scale and graduated to 4 of a degree.

Spd - Wet Bulb Thermometer by Neiman, graduated to single degree divisions, the difference between standard Thermometer and dry Thermometer of this instrument is $+0.2$, he taken into calculation.

	Feet.
Lowest Monthly Average of Mean Tides in the Months of February and March, above the Zero of Gauge at Kyd's Dock Yard, Calcutta,.....	8.36
Difference of Level between the Zero of Tide Gauge at Kyd's Dock Yard, and the Standard Barometer, at the Observatory.....	26.52

Height of Standard Borehole above the Level of the Sea 182

